REPORT

ON

HEALTH CONDITIONS

IN THE

NORTHWEST TERRITORIES

Regional Director Medical Services N.W.T. Region

National Health and Welfare, Canada

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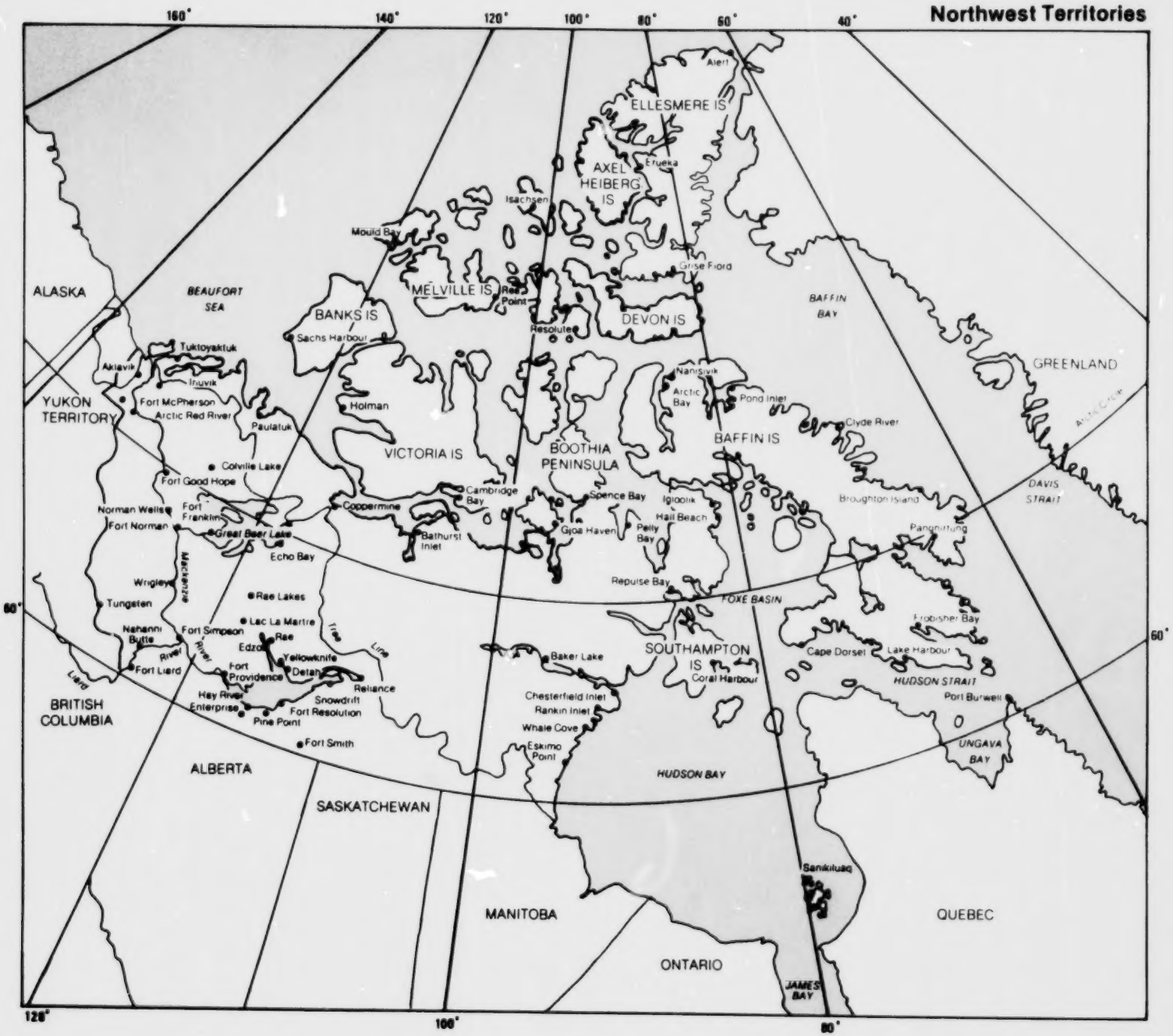
Northwest Territories
160°
140°
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60°
40°
ALASKA
BEAUFORT SEA
YUKON TERRITORY
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
BANKS IS
MELVILLE IS
ELLESMERE IS
AXEL HEIBERG IS
DEVON IS
VICTORIA IS
BOOTHIA PENINSULA
BAFFIN IS
SOUTHAMPTON IS
GREENLAND
BAFFIN BAY
HUDSON BAY
FOXE BASIN
HUDSON STRAIT
UNGAVA BAY
DAVIS STRAIT
JAMES BAY
Alert
Eureka
Isachsen
Mould Bay
Grise Fiord
Red Point
Resolute
Sachs Harbour
Tuktoyaktuk
Aklavik
Inuvik
Fort McPherson
Arctic Red River
Holman
Paulatuk
Colville Lake
Fort Good Hope
Norman Wells
Fort Norman
Fort Franklin
Great Bear Lake
Echo Bay
Coppermine
Cambridge Bay
Bathurst Inlet
Spence Bay
Gjoa Haven
Pelly Bay
Igloolik
Hall Beach
Repulse Bay
Arctic Bay
Nanisivik
Pond Inlet
Clyde River
Broughton Island
Pangnirtung
Frobisher Bay
Cape Dorset
Lake Harbour
Baker Lake
Coral Harbour
Chesterfield Inlet
Rankin Inlet
Whale Cove
Eskimo Point
Sanikiluaq
Port Burwell
Wrigley
Tungsten
Nahanni Butte
Fort Liard
Rae Lakes
Lac La Martre
Fort Simpson
Rae
Edzo
Yellowknife
Fort Providence
Detah
Hay River
Enterprise
Snowdrift
Fort Resolution
Pine Point
Reliance
Fort Smith
Mackenzie River
Liard River
Liard Line
60°
120°
100°
80°

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INTRODUCTION

Northern Health Services, commonly known as Medical Services Branch, N.W.T. Region, operates a public health program for all residents of the Northwest Territories, including maternal and child health clinics, adult health, communicable disease control, water and sanitation inspection, home visiting, screening, health education and immunization programs. Additional treatment services are provided, as requested, to all residents.

Health care responsibility is currently shared with the Government of the Northwest Territories and the Federal Department of Health and Welfare Canada. The Department of Health, Government of the Northwest Territories, is responsible for four hospitals: Stanton Yellowknife Hospital, Hay River Hospital, Fort Smith Health Centre and Baffin Regional Hospital.

In addition, the Government of the Northwest Territories is responsible for twelve (12) nursing stations and two (2) health centres in the Baffin Region. As well the Government of the Northwest Territories manages the hospital insurance and health care plans and supplementary health care benefits, including pharmacare program, for residents sixty-five years of age and over. The Government of the Northwest Territories legislates ordinances which control health activities in the Northwest Territories.

Medical Services Branch, N.W.T. Region, operates the Inuvik General Hospital, and a cottage hospital at Fort Simpson. In addition, there are thirty (30) nursing stations, five (5) health centres, and a number of health stations.

Nursing stations are located in settlements of one hundred and fifty (150) to one-thousand (1,000) population. The number of nurses at a nursing station is based upon the population served and the particular community needs. As a general rule, the number will vary from one to four. The general nursing station design provides for: (a) treatment area; (b) inpatient acute care beds for adults, children, and infants requiring treatment of minor or uncomplicated illness; (c) public health area; (d) basic laboratory facilities, including x-ray; (e) office space; and in some cases, (f) living quarters for nurses.

The nurse practitioner in the nursing station is recognized as the primary provider of medical services at the community level. Many of these nurses have taken additional training beyond their basic registered nursing in such areas as public health or midwifery and have gained special expertise in diagnosis and treatment.

The nurse in charge, attached to the nursing station, is responsible for the supervision of several programs and arranges for the provision of services that these programs entail.

All nursing stations are visited on a regular basis by physicians operating out of base hospitals located in major centres within the region. Specialist services are provided either from Yellowknife or through southern based universities (McGill University in Montreal, The University of Manitoba in Winnipeg, and The University of Alberta located in Edmonton). Under special arrangements with these universities, teaching programs are available,

such as rotating family practice residents.

Where possible, client services are provided within the local community. When treatment cannot be provided in the client's home community, arrangements are made for a transfer of the client to a centre where these services are available. Medical Services Branch provides this service at no cost to native clients. Subsidized medical travel is provided through the Government of the Northwest Territories, Department of Health, for non-native residents.

Dental services to communities are provided by private practitioners, government dentists and dental therapists. The dental therapist works alone in the communities, using treatment prescriptions provided for them by supervising dentists. These services are directed mainly at the school-age population.

RELATIONSHIP WITH THE GOVERNMENT OF THE NORTHWEST TERRITORIES

DEPARTMENT OF HEALTH

Health care objectives of the Northwest Territories are fulfilled through the cooperative efforts of Medical Services Branch and the Department of Health.

A Health Coordinating Committee formalizes the relationship between the Government of the Northwest Territories' Departments of Health and Social Services and Medical Services Branch, Department of National Health and Welfare Canada, N.W.T. Region. This committee provides guidelines to enhance the cooperative effort in fulfilling the health care objectives of the Northwest Territories. The Health Coordinating Committee meets on a monthly basis throughout the year.

HIGHLIGHTS OF EVENTS

The following outlines the highlights of events occurring in the Region and Zones:

REGION

September 1, 1986, saw the successful transfer of Baffin Zone Community Health Services from the Federal Government, Health and Welfare Canada to the Government of the Northwest Territories.

Two Zone Directors Conferences were held during 1986. The conferences provide a mechanism for Regional and Zone Managers to discuss, evaluate and plan the operations and administration of the various Medical Services Programs.

INUVIK

The Inuvik General Hospital was awarded full accreditation by the Canadian Council for Hospital Accreditation with reviewing in two years.

A major survey of the Inuvik General Hospital was completed by Public Works Canada. This report included detailed analysis and recommendations for remedial action on the building structure, heating and plumbing systems, electrical system, fire safety, and asbestos. Initial emergency work was implemented.

A survey of the Inuvik General Hospital Laboratory Service and Facilities by a team from the University of Alberta provided impetus for changes to the Hematology and Micro-Biology Departments.

Renovations in the Radiology Department have enabled safeguards to be implemented to reduce radiation dosage to clients.

The Inuvik Regional Hospital Advisory Board assumed the additional responsibility in February, 1986, of the management of the Inuvik Long Term Care Facility. This experience will assist the Board in the transfer process of health care responsibility.

The Inuvik Zone Transient Centre, supervised under a contract with a local native entrepreneur, has been in operation for one year and maintains an occupancy rate of sixty-five percent.

The Inuvik General Hospital actively participated in the Federal Native Health Careers Program during the year.

An expanded local Home Care Program enabled Inuvik General Hospital to assist in ensuring the appropriate ongoing care of clients.

Mental Health Workshops were held involving Zone employees and community representatives.

Regular Occcupational Health and Safety meetings, along with Union/Management meetings have increased Employee-Management communications.

Mackenzie

An agreement was signed with the Rae Dene Band through contribution to construct a new health facility in Fort Rae. The year was highlighted by the opening of the first nursing station in Lac La Martre. The former Lac La Martre Health Clinic was relocated to the Hay River Reserve.

Pine Point Health Services were transfered to a local service funded by the Government of the Northwest Territories.

Two Nursing Conferences were held during the year supported by Regional and Zone personnel.

A Hepatitis B Immunization Program was initiated in the Dogrib communities.

Tuberculosis cases, identified through a survey in the Rae Edzo area, were quickly brought under control by the combined efforts of Zone personnel and community leaders.

The Medical Clinic and Public Health Unit located in Tungsten were closed due to the closure of the Tungsten Mine.

Three contribution agreements were established during the year for transportation and health liaison services.

KEEWATIN

An Interagency Co-ordinating Committee comprised of representatives from the Government of the Northwest Territories Department of Health, Department of Social Services, the Churchill Health Centre and Medical Services Branch was established to facilitate the resolution of common concerns and plan for the maximal use of community resources.

A four (4) day Nursing Workshop was held in November, 1986, and eleven (11) nurses participated. C.P.R and First Aid training was provided by St. John Ambulance instructors. Additional inservice programs were included.

The health care concerns of Keewatin residents are addressed on a monthly basis by the Keewatin Committee, a sub-committee of the Board of the Churchill Health Centre. Membership includes a representative from each of: Keewatin Regional Council, Keewatin Inuit Association, Northern Medical Unit,

University of Manitoba, Northwest Territories Department of Health, Keewatin Region, Transient Centre, Churchill Health Centre and Medical Services.

Three community health representatives continue to work in the Zone (Baker Lake, Rankin Inlet, Eskimo Point). Emphasis has been put on the development and support of Health Committees and needs of the elders. Health Committees are active in eight communities.

Community agencies and Hamlet managers are working with nurses in charge in the development of a Community Disaster Plan.

The emphasis for 1986 was placed on the dental health of preschool age children and the screening of individuals with hearing impairments.

ADMINISTRATION

The Administration Directorate plays a vital role in supplying services to the Region in General Administration, Property Management and Contracts and Accommodation.

Each area has a section head and support staff who are all located in the Regional Office. The Assistant Regional Director has overall responsiblility for the Directorate.

It is the responsibility of the Regional Administration Directorate to provide advice to Zone and Program Managers in all aspects of Administration.

The Contracts Section is responsible for the processing of Contracts and Contributions in Region and is also responsible for Administration of staff housing accommodation.

The Administration Section is primarily responsible for Office Service, Central Registry, Reception, Relocation, Word Processing, Materiel Management and Lease Accommodation.

Administration Highlights in 1986/87

In 1986/87 Materiel Management processed a total of one thousand nine hundred and forty one (1,941) purchase orders.

The Contracts Section processed one hundred and seventy (170) contracts for a total of twenty eight million (28,000,000.00) dollars.

PROPERTY MANAGEMENT

This department is responsible for construction of Federal buildings in the Region and also provides functional advice and guidance to the Zone Maintenance supervisors in regard to maintenance of the Nursing Stations, Health Centres and Hospitals in the Northwest Territories Region.

MAINTENANCE AND CONTRUCTION PROGRAM

N. W. T. REGION

General Maintenance

During 1986 information was gathered regarding the possibilities of utilizing government agencies, either Federal or Government of the Northwest Territories, for contract maintenance.

At present, maintenance is a Zone responsibility, with Mackenzie and Inuvik maintenance being done solely by Medical Services employees. With the transfer of Baffin Zone to Government of the Northwest Territories, Keewatin Zone is the only Zone presently using a combination of Medical Services employees and semi-annual maintenance runs.

Capital Construction

The Capital Construction program for the Northwest Territories Region took a slight downturn as the majority of new construction projects have been completed. The program consisted of seven (7) major projects with an additional eighteen (18) projects in various stages of construction or planning.

INUVIK ZONE

Arctic Red River

Warranty inspection was completed with all items corrected.

Fort Norman

Warranty inspection was completed and additional landscaping was completed.

Paulatuk

The construction of the nursing station/residence was completed and the building is under the warranty period. The old facility was disposed of.

Sachs Harbour

The warranty inspection was completed and any problems were corrected.

Tuktoyaktuk

Plans and Specifications were completed and the tender process was completed. Construction is to start in June of 1987. The old facility will be demolished to make room for a new station on existing land.

Inuvik General Hospital

Several minor projects were undertaken including the upgrading of the Laboratory, installation of a security system and upgrading of electrical and fire safety systems. Problems with the heating system were identified and Plans and Specifications were developed with a view to major repair being undertaken in 1987.

MACKENZIE ZONE

Fort Resolution

Renovations were substantially completed this year with seasonal deficiencies to be completed in the summer of 1987.

Fort Wrigley

The project and the warranty inspection were completed.

Fort Liard

The new nursing station/residence was completed and the facility is now under the warranty period. The old facility was removed for re-use and the site restored.

Fort Simpson

The upgrading of the Fire Protection System was started and will be completed in 1987.

Gjoa Haven

Major renovations were undertaken, with most the of work completed. Seasonal deficiencies will be completed in the summer of 1987. Plans and Specifications were developed for construction of a duplex residence during 1987.

Holman Island

Construction of the roof was completed. Seasonal deficiencies are to be completed in the summer of 1987.

Coppermine

Construction of the new station was substantially completed this year. Renovation of the existing nursing station, including a fourplex, will be started in 1987.

Lac La Martre

Construction of the nursing station/residence has been completed and the facility is now under the warranty period. The old facility was trucked to Hay River and the site restored.

Hay River

Duplex trailer units were trucked in from Lac La Martre. A unit was placed on the prepared site and the facility is now operational with handicap access provided.

Snowdrift

Construction of the nursing station/residence was completed, and the facility is now under the warranty period. The old facility was disposed of.

Spence Bay

Plans and Specifications were completed this year. Tendering and construction will start in 1987.

Cambridge Bay

Plans and Specifications were developed this year for construction of an eightplex residence. Construction will commence in 1988.

Keewatin Zone

Baker Lake

Construction of the nursing station/residence was completed. The warranty inspection was completed.

Coral Harbour

Warranty problems were identified and corrective measures taken.

Whale Cove

Construction of the new nursing station/residence was substantially completed. Completion and occupancy will be in early 1987.

Rankin Inlet

Preliminary Plans and Specifications started for major renovation of the existing nursing station.

Baffin Zone

Cape Dorset

Construction for renovations to the dental therapists' house were completed.

Lake Harbour

Warranty items were identified on a warranty inspection this year.

Hall Beach

Construction of the nursing station/residence was completed. The interim inspection was completed with seasonal deficiencies to be done in the summer of 1987. The old facility was disposed of.

Pangnirtung

All deficiencies were corrected in the renovated nursing station and sixplex residence.

Pond Inlet

Minor renovations were completed this year.

1986/87 Budget

Total Budget	$6,100,000.00
Capital Contributions	$1,464,000.00

Budget break down per Zone as follows:

Inuvik	$378,000.00
Mackenzie	$3,758.000.00
Capital Contribution	$1,464.000.00
Keewatin	$1,743,000.00
Baffin	$187,000.00

1985/86
Medical Services Branch
N.W.T. Region
Actual Operating Costs

	Regional Headquarters	Mackenzie Zone	Inuvik Zone	Keewatin Zone	Baffin Zone	TOTAL
Person Years	69.47	119.73	165.98	55.55	71.24	481.97
Salary	2,636,053	4,909,926	6,106,876	2,120,679	3,026,923	18,800,457
NIS	133,813	5,932,985	3,783,263	4,581,632	4,701,015	19,132,708
O & M	2,673,292	2,241,471	3,436,017	1,233,464	1,559,768	11,144,012
Capital	553,894	3,918,480	1,541,204	396,213	3,095,968	9,505,759
Contributions	3,625,819					3,625,819
TOTAL	9,622,871	17,002,862	14,867,360	8,331,988	12,383,674	62,208,755

VITAL STATISTICS

NORTHWEST TERRITORIES VITAL STATISTICS

The cut-off date for registration of 1986 vital statistics was February 15, 1987.

Total births and deaths for 1986 include events occurring outside the Northwest Territories where either the individual's or the mother's usual residence was in the Northwest Territories. The totals also include 1985 vital statistics registered in 1986.

Events occurring in Territorial health centres and cottage hospitals were included in hospital totals, and all "Out of Province" events were included with hospital totals.

Unknown birthweights were recorded as being normal.

The ethnic status of all livebirths and stillbirths were coded according to the mothers' ethnic status.

BIRTHS

The numerical sequence of 1986 livebirth registrations in the Northwest Territories was 001-001 to 002-172, with the exception of numbers 001-252, 001-489, 001-730, 001-947, which were deleted because the mother's usual residence was outside the Northwest Territories.

The numerical sequence of 1986 "Out of Province" livebirth registrations was 1986-001 to 1986-0271. There were no deletions.

The numerical sequence of 1985 livebirths registered in 1986 was 1860 and 002-168 to 002-186 for "In the Territories" births. The numerical sequence of 1985 livebirths registered in 1986 was 1985-1211 to 1985-1230 for "Out of Territories" births.

DEATHS

The numerical sequence of 1986 death registrations was 001-013 to 001-197 with the exception of numbers 001-036, 001-065, 001-085, 001-113, 001-119, 001-138, 001-142, 001-152, 001-174, 001-165, 001-182 to 001-184, which were deleted because the usual residence was outside the Northwest Territories.

The numerical sequence of "Out of Province" death registrations was 1986-001 to 1986-036 and 1986-001-1097 to 001-1107.

The numerical sequence of 1985 deaths registered in 1986 was 001-170 to 001-184, except 001-177, which was deleted because the usual residence was outside the Northwest Territories.

The numerical sequence of 1985 "Out of Province" deaths registered in 1986 was 1985-030 to 1985-041.

The numerical sequence of stillbirth registrations in 1986 was 001-001 to 001-018.

The numerical sequence of 1985 stillbirth registrations in 1986 was 001-010 and 001-011.

N.W.T. VITAL STATISTIC TRENDS

This report for 1986 contains a variety of tables which are designed to show trends in certain important demographic indicators, as well as causes of death by sex, age, ethnicity and location.

The 1986 livebirth rate of 28.3 represents a very slight decrease from the 1984 rate of 28.4. The Indian birth rate of 30.9 was slightly lower than the 1985 rate of 31.1 and the Inuit rate of 38.5 was higher than the 1985 rate of 35.6. There were more low birth weight infants in 1986, the total for the Region being 6.6 as compared to the 1985 total of 4.8. The percentage of low birth weight infants reported for the Indian population in 1986 was 4.7, lower than the 1985 rate of 6.1. There was a rate of 7.4 low birth weight infants for the Inuit population as compared to 6.4 in 1985. The rest of the population (other) had a rate of 6.4 in 1986, higher when compared to 2.8 in 1985.

The stillbirth rate was 13.4 which is significantly higher than the 1985 rate of 5.5.

The 1986 perinatal mortality rate of 21.4 also rose significantly compared to the 1985 rate of 7.6.

The 1986 neonatal mortality rate increased to 10.8 from the 1985 rate of 3.5.

The infant mortality rate in 1986 of 21.0 shows an increase from the 1985 rate of 15.9.

The crude death rate of 4.6 is slightly higher than the 1985 rate of 4.4.

The leading causes of death in the Northwest Territories were Accidents, Injuries and Violence (34.0). Diseases of the Circulatory System ranked second (19.3) and Neoplasms were the third leading cause of death in 1986 (8.8).

PRELIMINARY N.W.T. POPULATION ESTIMATES
June 1986
(Territorial Regional Boundaries)

	TOTAL	INUIT	INDIAN	OTHER
NORTHWEST TERRITORIES	52,238	18,543	7,514	26,181
BAFFIN REGION	9,975	8,185	5	1,785
Arctic Bay	477	449	-	28
Broughton Island	439	421	-	18
Cape Dorset	872	815	-	57
Clyde River	471	456	-	15
Grise Fiord	114	103	-	11
Hall Beach	451	435	-	16
Igloolik	857	807	-	50
Iqaluit	2,947	1,785	5	1,157
Lake Harbour	326	298	-	28
Nanisivik	315	130	-	185
Pangnirtung	1,004	938	-	66
Pond Inlet	796	736	-	60
Resolute Bay	184	166	-	18
Sanikiluaq	422	402	-	20
Unorganized	300	244	-	56
KEEWATIN REGION	4,986	4,330	19	637
Baker Lake	1,009	881	6	122
Chesterfield Inlet	294	267	-	27
Coral Harbour	477	435	-	42
Eskimo Point	1,189	1,114	-	75
Rankin Inlet	1,374	1.034	13	327
Repulse Bay	420	403	-	17
Whale Cove	210	188	-	22
Unorganized	13	8	-	5
KITIKMEOT REGION	3,750	3,333	5	412
Bathurst Inlet	16	16	-	-
Bay Chimo	61	59	-	2
Cambridge Bay	1,002	804	5	193
Coppermine	888	814	-	74
Gjoa Haven	650	616	-	34
Holman Island	303	275	-	28
Pelly Bay	297	269	-	28
Spence Bay	488	445	-	43
Unorganized	45	35	-	10

PRELIMINARY N.W.T. POPULATION ESTIMATES
June 1986
(Territorial Regional Boundaries)

	TOTAL	INUIT	INDIAN	OTHER
INUVIK REGION	8,411	2,361	2,174	3,876
Aklavik	763	391	157	215
Arctic Red River	108	5	82	21
Colville Lake	52	-	51	1
Fort Franklin	532	-	334	198
Fort Good Hope	562	-	406	156
Fort McPherson	760	-	572	188
Fort Norman	332	-	236	96
Inuvik	3,389	828	279	2,282
Norman Wells	627	5	32	590
Paulatuk	193	181	-	12
Sachs Harbour	158	140	5	13
Tuktoyaktuk	929	808	20	101
Unorganized	6	3	-	3
FORT SMITH REGION	25,116	334	5,311	19,471
Detah	131	-	129	2
Enterprise	56	-	-	56
Fort Liard	395	-	315	80
Fort Providence	588	-	422	166
Fort Resolution	447	-	190	257
Fort Simpson	987	-	452	535
Fort Smith	2,460	66	334	2,060
Hay River	2,964	27	111	2,826
Hay River Reserve	180	-	178	2
Jean Marie River	64	4	50	10
Kakisa Lake	30	-	30	-
Lac La Martre	345	-	329	16
Nahanni Butte	84	-	72	12
Paradise Gardens	42	-	4	38
Pine Point	1,558	10	60	1,488
Rae Lakes	183	-	77	106
Rae-Edzo	1,378	-	958	420
Reliance	11	-	4	7
Salt Plains Reserve	14	-	14	-
Snare Lake	119	-	117	2
Snowdrift	273	-	243	30
Trout Lake	54	-	49	5
Tungsten	238	-	6	232
Wrigley	161	-	148	13
Yellowknife	11,753	202	694	10,857
Unorganized	601	25	325	251

REPORTED VITAL STATISTICS 1986

		INDIAN		INUIT		TOTAL INDIAN/ INUIT		OTHER		NORTHWEST TERRITORIES	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
POPULATION											
Preliminary N.W.T. Population Estimates	(a)	7,514	14.4	18,543	35.5	26,057	49.9	26,181	50.1	52,238	100.0
Total Births in N/S	(b)	10	4.3	57	7.9	67	7.0	5	.9	72	4.8
Total births in Hospital	(c)	223	95.3	665	91.6	888	92.7	535	99.1	1,423	95.0
Total births in other locations	(d)	1	0.4	2	0.3	3	0.3	0	0	3	0.2
Total births	(e)	234		724		958		540		1,498	
Total live births	(f)	232	30.9	713	38.5	945	36.3	533	20.4	1,478	28.3
Low birth weight infants	(g)	11	4.7	53	7.4	64	6.8	34	6.4	98	6.6
DEATHS											
Stillbirths	(h)	2	8.5	11	15.2	13	13.6	7	13.0	20	13.4
Perinatal	(i)	3	12.8	20	27.6	23	24.0	9	16.7	32	21.4
Neonatal	(j)	2	8.6	10	14.0	12	12.7	4	7.5	16	10.8
Post neonatal	(k)	0	0	10	14.0	10	10.6	5	9.4	15	10.1
Total infant	(l)	2	8.6	20	28.1	22	23.3	9	16.9	31	21.0
Maternal	(m)	0	0	0	0	0	0	0	0	0	0
Other deaths	(n)	42		95		137		70		207	
Total deaths	(o)	44	5.9	115	6.2	159	6.1	79	3.0	238	4.6
NATURAL INCREASE	I	188	25.0	598	32.2	786	30.2	454	17.3	1,240	23.7

LEGEND

a) Population.
b) Rate per 100 births (total births (e)).
c) Rate per 100 births (total births (e)).
d) Rate per 100 births (total births (e)).
e) This should be equal to total (b) + (c) + (d) and also of (f) + (h).
f) Rate per 1,000 population (a).
g) 2.5 kg. or under. Rate per 100 live births (f).
h) Foetal deaths of 20 weeks or more gestation or more than 500 gm. Ratio per 1,000 total births (e).
i) Stillbirths + deaths under 7 days. Rate per 1,000 total births (e).
j) Under 28 days. Rate per 1,000 live births (f).
k) 28 days and under 1 year. Rate per 1,000 live births (f).
l) Under 1 year (j) + (k). Rate per 1,000 live births (f).
m) Rate per 10,000 live births (f).
n) All other deaths includes maternal deaths (m) but excludes infant.
o) Total deaths equals infant deaths (l) plus other deaths (n). Crude death rate per 1,000 population (a).
I) Natural increase rate.

$$\frac{(f) - (o)}{(a)} \times 1{,}000$$

		MACKENZIE		INUVIK		KEEWATIN		BAFFIN		NORTHWEST TERRITORIES	
POPULATION		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Population served. Total Midyear Registered	(a)	28,866	55.2	8,411	16.1	5,408	10.4	9,553	18.3	52,238	100.0
Total births in N/S	(b)	20	2.9	8	3.2	13	6.5	31	9.0	72	4.8
Total births in Hospital	(c)	678	97.0	246	96.9	187	93.0	312	90.7	1,423	95.0
Total births in other locations	(d)	1	0.1	0	0	1	0.5	1	0.3	3	0.2
Total births	(e)	699		254		201		344		1,498	
Total live births	(f)	691	23.9	250	29.7	198	36.6	339	35.5	1,478	28.3
Low birth weight infants	(g)	40	5.8	19	7.6	13	6.6	26	7.7	98	6.6
DEATHS											
Stillbirths	(h)	8	11.4	4	15.7	3	14.9	5	14.5	20	13.4
Perinatal	(i)	12	17.2	6	23.6	3	14.9	11	32.0	32	21.4
Neonatal	(j)	7	10.1	2	8.0	0	0	7	20.6	16	10.8
Post neonatal	(k)	5	7.2	4	16.0	0	0	6	17.7	15	10.1
Total infant	(l)	12	17.4	6	24.0	0	0	13	38.3	31	21.0
Maternal	(m)	0	0	0	0	0	0	0	0	0	0
Other deaths	(n)	103		31		28		45		207	
Total deaths	(o)	115	4.0	37	4.4	28	5.2	58	6.1	238	4.6
NATURAL INCREASE	I	576	20.0	213	25.3	170	31.4	281	29.4	1,240	23.7

LEGEND

a) Population.
b) Rate per 100 births (total births (e)).
c) Rate per 100 births (total births (e)).
d) Rate per 100 births (total births (e)).
e) This should be equal to total (b) + (c) + (d) and also of (f) + (h).
f) Rate per 1,000 population (a).
g) 2.5 kg. or under. Rate per 100 live births (f).
h) Foetal deaths of 20 weeks or more gestation or more than 500 gm. Ratio per 1,000 total births (e).
i) Stillbirths + deaths under 7 days. Rate per 1,000 total births (e).
j) Under 28 days. Rate per 1,000 live births (f).
k) 28 days and under 1 year. Rate per 1,000 live births (f).
l) Under 1 year (j) + (k). Rate per 1,000 live births (f).
m) Rate per 10,000 live births (f).
n) All other deaths includes maternal deaths (m) but excludes infant.
o) Total deaths equals infant deaths (l) plus other deaths (n). Crude death rate per 1,000 population (a).
I) Natural increase rate.

$$\frac{(f) - (o)}{(a)} \times 1{,}000$$

NORTHWEST TERRITORIES VITAL STATISTICS - 1986

POPULATION:	INDIAN 7,514				INUIT 18,543				OTHER 26,181				TOTAL 52,238			
		1986	1985	1984		1986	1985	1984		1986	1985	1984		1986	1985	1984
	NO	RATE	RATE	RATE	NO	RATE	RATE	RATE	NO	RATE	RATE	RATE	NO	RATE	RATE	RATE
A. Total Births	234				724				540				1,498			
B. Live Births	232	30.9	31.1	28.8	713	38.5	35.6	36.2	533	20.4	22.5	23.1	1,478	28.3	28.4	28.6
C. Low Birthweight Infants	11	4.7	6.1	5.8	53	7.4	6.2	4.9	34	6.4	2.8	5.8	98	6.6	4.8	5.4
D. Stillbirths	2	8.5	12.8	23.4	11	15.2	3.1	4.7	7	13.0	5.2	8.7	20	13.4	5.5	9.1
E. Perinatal Deaths	3	12.8	12.8	32.7	20	27.6	6.2	11.1	9	16.7	6.9	12.2	32	21.4	7.6	14.7
F. Neonatal Deaths	2	8.6	0	14.4	10	14.0	6.2	6.3	4	7.5	1.7	5.3	16	10.8	3.5	7.1
G. Post Neonatal Deaths	0	0	8.7	28.7	10	14.0	21.8	6.3	5	9.4	3.5	1.8	15	10.1	12.4	7.8
H. Infant Deaths (Under 1 Year)	2	8.6	8.7	43.1	20	28.1	28.0	12.7	9	16.9	5.2	7.0	31	21.0	15.9	14.9
I. Total Deaths (Crude Death Rate)	44	5.9	8.2	7.6	115	6.2	5.9	5.3	79	3.0	2.2	2.8	238	4.6	4.4	4.4
J. Natural Increase	188	25.0	22.9	21.9	598	32.2	29.7	31.2	454	17.3	20.3	20.6	1,240	23.7	24.0	24.5
K. Maternal Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LEGEND

a) Total births
b) Rate per 100 (total births (a))
c) 2.5 kg. or under; Rate per 1,000 live births(b)
d) Foetal deaths of 20 weeks or more gestation or more than 500 gms.
e) Stillbirths & deaths under 7 days; Rate per 1,000 total births (a)
f) Under 28 days; Rate per 1,000 live births (b)
g) 28 days to 1 year; Rate per 1,000 live births (b)
h) Under 1 year (f) & (g); Rate per 1,000 live births (b)
i) Total deaths=infant deaths (h) + other deaths; Rate per 1,000 population
j) Natural increase rate

$$\frac{(b) - (i)}{pop} \times 1,000$$

k) Rate per 10,000 live births

CAUSES OF DEATH - 1986
BY INTERNATIONAL CLASSIFICATION
OF DISEASE, ETHNICITY AND SEX

CAUSE OF DEATH	INDIAN			INUIT			OTHER			TOTAL		
	M	F	% OF TOTAL DEATHS	M	F	% OF TOTAL DEATHS	M	F	% OF TOTAL DEATHS	M	F	% of TOTAL DEATHS
1. Infectious & Parasitic Diseases	2	1	1.3	1	1	0.8	0	0	0	3	2	2.1
2. Neoplasms	2	0	0.8	4	6	4.2	6	3	3.8	12	9	8.8
3. Endocrine, Nutritional & Metabolic Diseases & Immunity Diseases	0	0	0	0	1	0.4	0	0	0	0	1	0.4
4. Diseases of the Blood and Blood-Forming Organs	0	0	0	0	0	0	0	0	0	0	0	0
5. Mental Disorders	0	0	0	0	0	0	0	0	0	0	0	0
6. Diseases of the Nervous System & Sense Organs	0	0	0	0	1	0.4	1	0	0.4	1	1	0.8
7. Diseases of the Circulatory System	6	3	3.8	11	8	8.0	15	3	7.6	32	14	19.3
8. Diseases of the Respiratory System	0	0	0	4	3	2.9	5	0	2.1	9	3	5.0
9. Diseases of the Digestive System	0	0	0	2	1	1.3	1	0	0.4	3	1	1.7
10. Diseases of the Genitourinary System	1	0	0.4	1	1	0.8	0	1	0.4	2	2	1.7
14. Congenital Anomalies	0	0	0	0	1	0.4	0	0	0	0	1	0.4
15. Certain Conditions Originating in the Perinatal Period	0	2	0.8	9	4	5.5	2	1	1.3	11	7	8.0
16. Symptoms, Signs and Ill-Defined Conditions	8	5	5.5	12	12	10.1	5	2	2.9	25	19	18.5
17. Injury & Poisoning	9	5	5.9	20	12	13.4	23	11	14.3	52	28	34.0
TOTAL	28	16	18.5	64	51	48.3	58	21	33.2	150	88	100.0

CAUSES OF DEATH
BY INTERNATIONAL CLASSIFICATION
OF DISEASE, AGE AND SEX - 1986

CAUSE OF DEATH	UNDER 15		15-24		25-34		35-44		45-54		55-64		65+		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. Infectious and Parasitic Diseases	1	0	0	0	0	0	0	0	0	0	0	0	2	2	3	2
2. Neoplasms	1	0	1	0	1	2	0	0	4	1	2	3	3	3	12	9
3. Endocrine, Nutritional & Metabolic Diseases & Immunity Diseases	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4. Diseases of the Blood & Blood-Forming Organs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. Mental Disorders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Diseases of the Nervous System & Sense Organs	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7. Diseases of the Circulatory System	1	3	0	0	0	1	0	0	4	0	9	3	18	7	32	14
8. Diseases of the Respiratory System	0	1	0	0	0	0	0	0	2	1	3	0	4	1	9	3
9. Diseases of the Digestive System	1	0	1	0	0	0	0	0	0	0	0	1	1	0	3	1
10. Diseases of the Genitourinary System	0	2	0	0	0	0	0	0	0	0	0	0	2	0	2	2
14. Congenital Anomalies	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
15. Certain Conditions Originating in the Perinatal Period	11	7	0	0	0	0	0	0	0	0	0	0	0	0	11	7
16. Symptoms, Signs, & Ill-Defined Conditions	4	2	3	3	2	0	0	1	1	2	5	5	10	6	25	19
17. Injury & Poisonings	4	5	19	10	10	4	6	4	7	4	3	1	3	0	52	28
TOTAL	24	21	24	13	13	7	6	6	18	9	22	13	43	19	150	88

DEATHS BY SEX, AGE AND ETHNICITY-1986

AGE	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
Under 15	0	2	15	14	9	5	24	21
15-24	3	2	13	8	8	3	24	13
25-34	1	1	4	2	8	4	13	7
35-44	4	2	2	1	0	3	6	6
45-54	1	1	8	7	9	1	18	9
55-64	3	2	8	9	11	2	22	13
65+	16	6	14	10	13	3	43	19
TOTAL	28	16	64	51	58	21	150	88

DEATHS FROM CANCER

BY SITE, ETHNICITY AND SEX - 1986

SITE	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
ABDOMINAL	0	0	1	0	0	0	1	0
LUNG	0	0	2	6	0	0	2	6
STOMACH	0	0	0	0	2	0	2	0
BOWEL	2	0	0	0	2	1	4	1
NEUROBLASTOMA	0	0	0	0	1	0	1	0
LIVER	0	0	0	0	1	0	1	0
CERVIX	0	0	0	1	0	1	0	2
LYMPHOMA	0	0	0	0	1	0	1	0
LEUKEMIA	0	0	1	0	0	0	1	0
UNKNOWN	0	0	0	0	0	1	0	1
TOTAL	2	0	4	7	7	3	13	10

DEATHS FROM CANCER

BY SITE, AGE AND SEX - 1986

SITE	UNDER15		15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 +		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ABDOMINAL	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
LUNG	0	0	0	0	0	0	0	0	1	1	1	3	0	2	2	6
STOMACH	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
BOWEL	0	0	0	0	0	0	0	0	0	0	1	0	3	1	4	1
NEUROBLASTOMA	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
LIVER	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
CERVIX	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
LYMPHOMA	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
LEUKEMIA	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
UNKNOWN	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	1	0	1	2	0	0	4	2	3	3	3	3	13	10

DEATHS FROM CANCER

BY AGE, ETHNICITY AND SEX - 1986

	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
UNDER 15	0	0	0	0	1	0	1	0
15 - 24	0	0	1	0	0	0	1	0
25 - 34	0	0	0	0	1	2	1	2
35 - 44	0	0	0	0	0	0	0	0
45 - 54	0	0	2	2	2	0	4	2
55 - 64	0	0	1	3	2	0	3	3
65 +	2	0	0	2	1	1	3	3
TOTAL	2	0	4	7	7	3	13	10

DEATHS BY ACCIDENTS, INJURIES AND VIOLENCE
BY METHOD, ETHNICITY AND SEX - 1986

METHOD	INDIAN			INUIT			OTHER			TOTAL		
	M	F	%	M	F	%	M	F	%	M	F	%
Motor Vehicle	2	1	3.8	0	0	0	5	4	11.3	7	5	15.0
Drowning	0	0	0	1	0	1.3	1	0	1.3	2	0	2.5
Exposure	2	1	3.8	3	2	6.3	2	0	2.5	7	3	12.5
Fire	0	0	0	1	3	5.0	2	0	2.5	3	3	7.5
Falls	1	0	1.3	0	1	1.3	0	1	1.3	1	2	3.8
Firearms	2	1	3.8	3	1	5.0	9	2	13.8	14	4	22.5
Overdoses	0	1	1.3	1	2	3.8	0	0	0	1	3	5.0
Industrial	0	0	0	0	0	0	0	0	0	0	0	0
Other	2	1	3.8	11	3	17.5	4	4	10.0	17	8	31.3
TOTALS	9	5	17.5	20	12	40.0	23	11	42.5	52	28	100.0

DEATHS BY ACCIDENTS, INJURIES AND VIOLENCE
BY METHOD, AGE AND SEX - 1986

METHOD	UNDER 15		15-24		25-34		35-44		45-54		55-64		65+		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Motor Vehicle	0	1	5	3	0	0	0	0	1	0	1	1	0	0	7	5
Drowning	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
Exposure	0	1	3	1	2	0	1	0	0	1	0	0	1	0	7	3
Fire	0	1	1	1	2	1	0	0	0	0	0	0	0	0	3	3
Falls	0	2	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Firearms	1	0	5	1	1	1	1	2	3	0	2	0	1	0	14	4
Overdoses	0	0	0	2	0	0	1	0	0	1	0	0	0	0	1	3
Industrial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	2	0	5	2	4	2	2	2	3	2	0	0	1	0	17	8
TOTALS	4	5	19	10	10	4	6	4	7	4	3	1	3	0	52	28

DEATHS BY ACCIDENTS, INJURIES AND VIOLENCE
BY AGE, ETHNICITY AND SEX - 1986

AGE	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
Under 15	0	0	2	3	2	2	4	5
15-24	3	2	8	6	8	2	19	10
25-34	0	1	4	1	6	2	10	4
35-44	4	1	2	0	0	3	6	4
45-54	1	1	3	2	3	1	7	4
55-64	0	0	0	0	3	1	3	1
65+	1	0	1	0	1	0	3	0
TOTALS	9	5	20	12	23	11	52	28

SUICIDES BY METHOD, ETHNICITY AND SEX - 1986

METHOD	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
Hanging	0	0	5	1	0	1	5	2
Overdose	0	0	1	0	0	0	1	0
Firearms	1	0	3	0	4	0	8	0
TOTALS	1	0	9	1	4	1	14	2

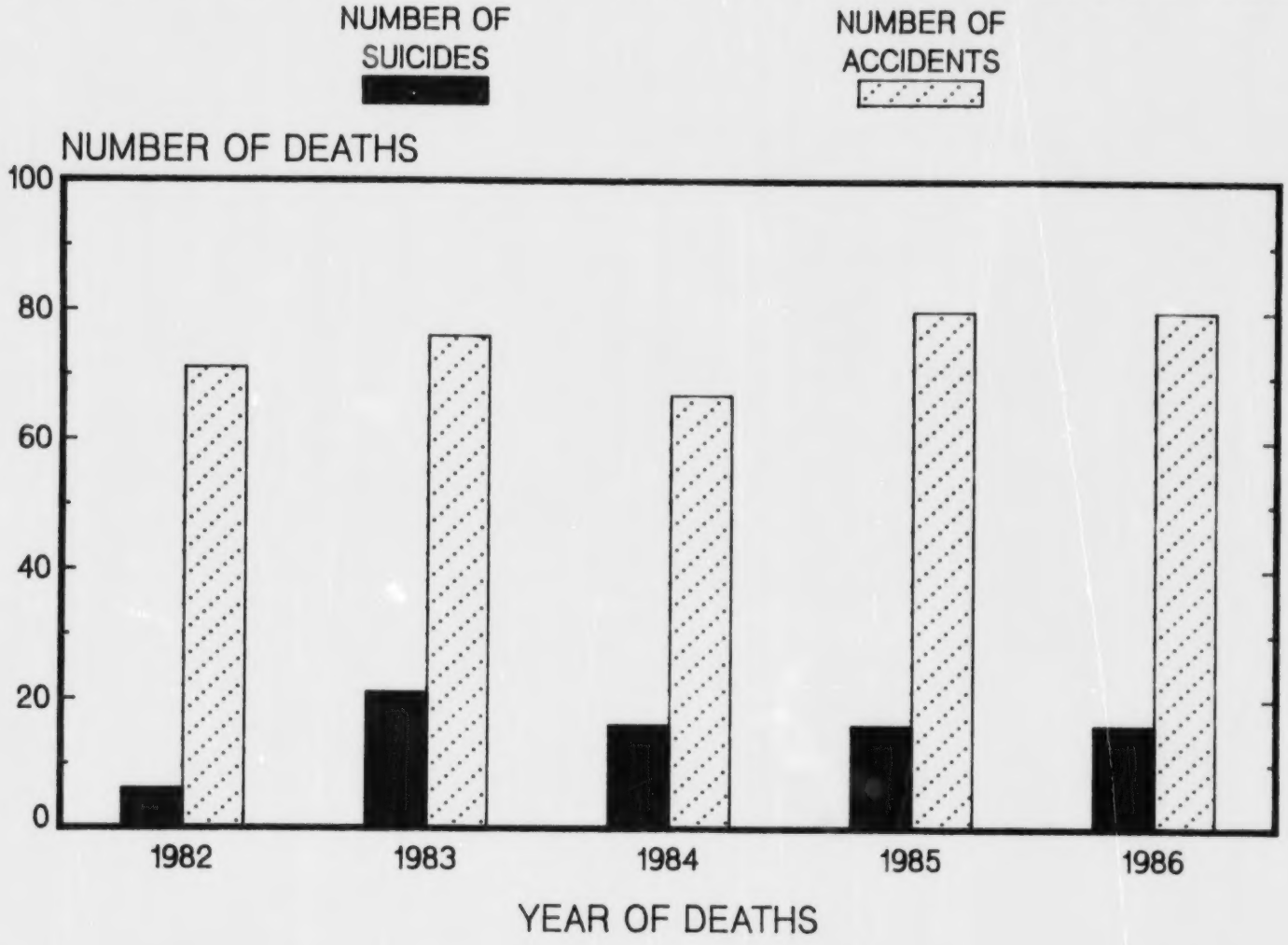
SUICIDES BY METHOD, AGE AND SEX - 1986

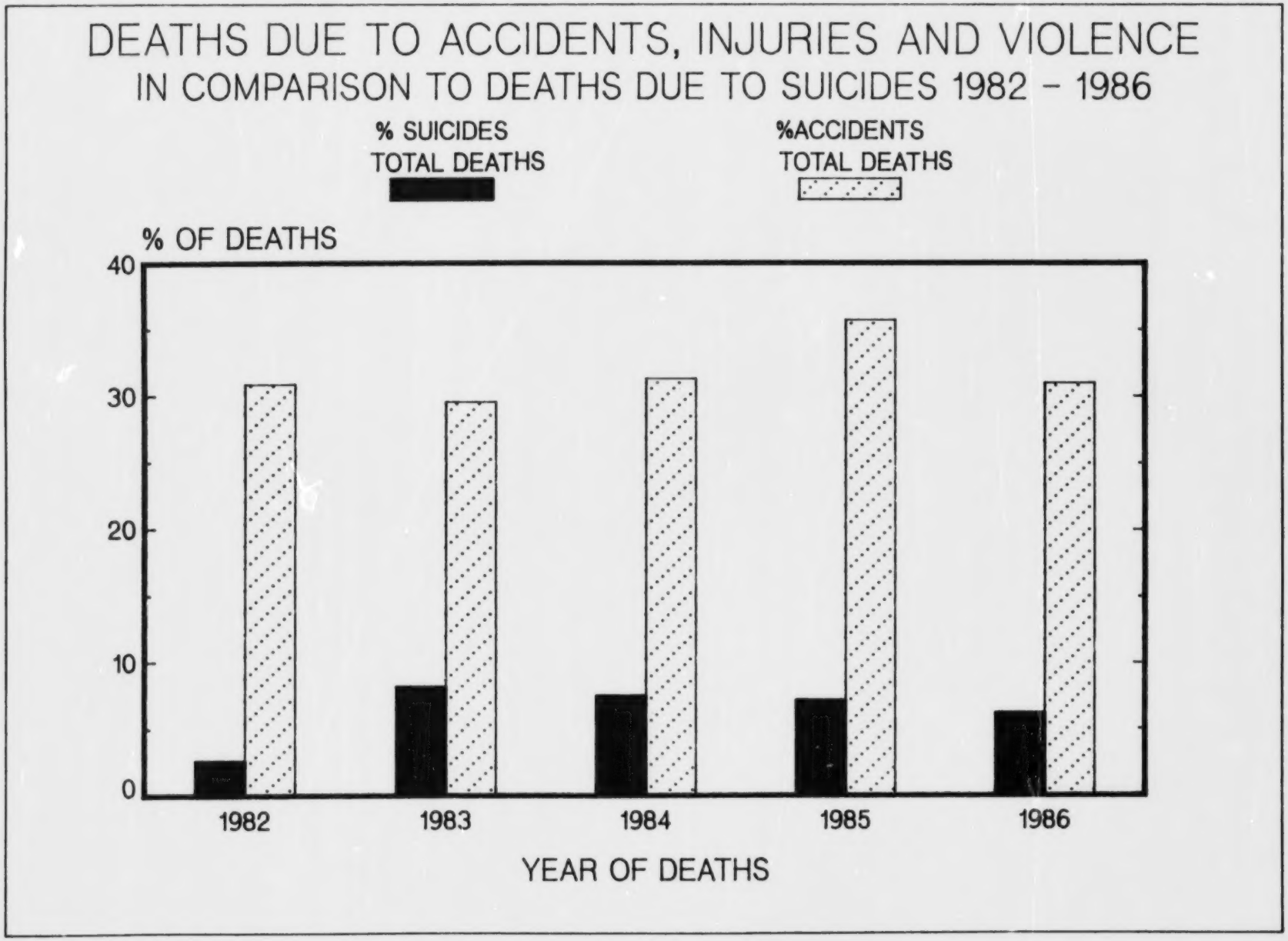
METHOD	UNDER 15		15-24		25-34		35-44		45-54		55-64		65+		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Hanging	0	0	3	1	1	0	1	0	0	1	0	0	0	0	5	2
Overdose	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Firearms	0	0	4	0	0	0	1	0	2	0	1	0	0	0	8	0
TOTALS	0	0	7	1	1	0	3	0	2	1	1	0	0	0	14	2

SUICIDES BY AGE, ETHNICITY AND SEX - 1986

	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
Under 15	0	0	0	0	0	0	0	0
15-24	0	0	5	1	2	0	7	1
25-34	0	0	1	0	0	0	1	0
35-44	1	0	2	0	0	0	3	0
45-54	0	0	1	0	1	1	2	1
55-64	0	0	0	0	1	0	1	0
65+	0	0	0	0	0	0	0	0
TOTALS	1	0	9	1	4	1	14	2

DEATHS DUE TO ACCIDENTS, INJURIES AND VIOLENCE IN COMPARISON TO DEATHS DUE TO SUICIDES 1982 - 1986




DEATHS DUE TO ACCIDENTS, INJURIES AND VIOLENCE
IN COMPARISON TO DEATHS DUE TO SUICIDES 1982 - 1986
% SUICIDES
TOTAL DEATHS
%ACCIDENTS
TOTAL DEATHS
% OF DEATHS
40
30
20
10
0
1982
1983
1984
1985
1986
YEAR OF DEATHS

FIVE YEAR TRENDS IN N.W.T. INFANT HEALTH INDICATORS - 1986

INDICATORS	YEAR	INDIAN	INUIT	OTHER	TOTAL
LIVE BIRTHS Rate per 1,000 Population	1976 1981 1986	24.1 24.3 30.9	36.1 32.1 38.5	31.5 25.0 20.4	31.8 27.3 28.3
LOW BIRTHWEIGHT INFANTS Rate per 100 Live Births	1976 1981 1986	12.8 8.7 4.7	6.6 8.1 7.4	5.1 3.7 6.4	6.9 6.3 6.6
STILLBIRTHS Rate per 1,000 Total Births	1976 1981 1986	5.3 9.5 8.5	7.6 3.9 15.2	7.4 3.7 13.0	7.1 4.8 13.4
PERINATAL Mortality Rate (per 1,000 Total Births)	1976 1981 1986	21.3 14.3 12.8	15.1 23.6 27.6	23.8 11.2 16.7	19.8 16.7 21.4
NEONATAL DEATHS Rate per 1,000 Live Births	1976 1981 1986	16.0 4.8 8.6	13.3 19.7 14.0	16.6 7.5 7.5	15.2 12.0 10.8
POST NEONATAL Mortality Rate (per 1,000 Live Births)	1976 1981 1986	42.8 0.0 0.0	26.7 17.8 14.0	3.7 3.7 9.4	19.2 8.8 10.1
INFANT Mortality Rate (per 1,000 Live births)	1976 1981 1986	58.8 4.8 8.6	40.1 37.5 28.1	20.3 11.2 16.9	34.4 20.8 21.0

INFANT DEATHS BY CAUSE, ETHNICITY AND SEX - 1986

CAUSE OF DEATH	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
PERINATAL ASPHYXIA	0	0	0	2	0	0	0	2
PULMONARY HYPOPL.	0	0	0	1	0	0	0	1
HYALINE MEMBRANE DISASE	0	2	1	1	1	0	2	3
IMMATURITY	0	0	0	0	1	0	1	0
SPECIFIC CONDITION ORIG. PERINATAL	0	0	2	0	0	0	2	0
RESPIRATORY FAIL.	0	0	1	0	0	0	1	0
NECROTIZING ENTER-COLITIS	0	0	1	0	0	0	1	0
UNSPECIFIED COND. ORIG. PERINATAL	0	0	1	0	0	0	1	0
SEPTICEMIA	0	0	0	0	0	1	0	1
RENAL FAILURE	0	0	0	0	0	1	0	1
HEAD WOUND	0	0	0	0	1	0	1	0
ASPHYXIA/FOREIGN BODY	0	0	1	0	0	0	1	0
INTRACRANIAL INJ.	0	0	0	1	0	0	0	1
MENINGITIS	0	0	0	0	1	0	1	0
C.V. ARREST	0	0	0	1	0	0	0	1
ACUTE HEPATIC NEC.	0	0	1	0	0	0	1	0
RENAL INSUFF.	0	0	0	1	0	0	0	1
SIDS	0	0	2	1	0	1	2	2
SEPTIC SHOCK	0	0	0	0	1	0	1	0
PREMATURITY	0	0	1	0	0	0	1	0
UNKNOWN	0	0	0	1	1	0	1	1
TOTAL	0	2	11	9	6	3	17	14

INFANT DEATHS BY AGE, ETHNICITY AND SEX - 1986

AGE GROUP	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
EARLY NEONATAL (0 - 6 DAYS)	0	1	5	4	2	0	7	5
LATE NEONATAL (7 - 28 DAYS)	0	1	1	0	0	2	1	3
POST NEONATAL (29 DAYS - 1 YR)	0	0	5	5	4	1	9	6
TOTAL	0	2	11	9	6	3	17	14

INFANT DEATHS BY CAUSE, AGE AND SEX - 1986

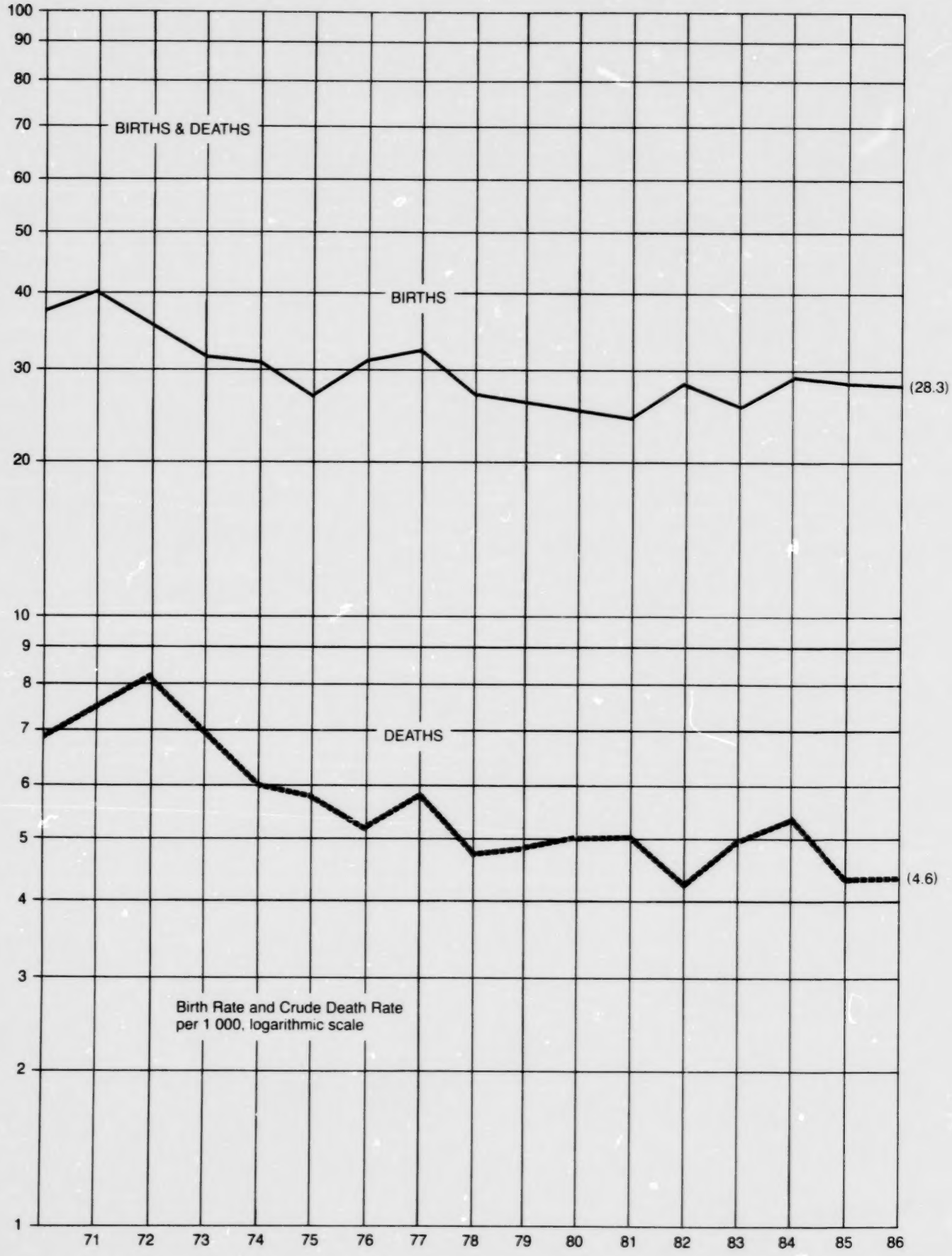
CAUSE OF DEATH	EARLY NEONATAL (0-6 DAYS)		LATE NEONATAL (7 - 28 DAYS)		POST NEONATAL (29 DAYS-1YR)		TOTAL	
	M	F	M	F	M	F	M	F
PERINATAL ASPHYXIA	0	2	0	0	0	0	0	2
PULMONARY HYPOPL.	0	1	0	0	0	0	0	1
HYALINE MEMBRANE DISASE	2	2	0	1	0	0	2	3
IMMATURITY	1	0	0	0	0	0	1	0
SPECIFIC CONDITION ORIG. PERINATAL	2	0	0	0	0	0	2	0
RESPIRATORY FAIL.	1	0	0	0	0	0	1	0
NECROTIZING ENTER-COLITIS	1	0	0	0	0	0	1	0
UNSPECIFIED COND. ORIG. PERINATAL	0	0	1	0	0	0	1	0
SEPTICEMIA	0	0	0	1	0	0	0	1
RENAL FAILURE	0	0	0	1	0	0	0	1
HEAD WOUND	0	0	0	0	1	0	1	0
ASPHYXIA/FOREIGN BODY	0	0	0	0	1	0	1	0
INTRACRANIAL INJ.	0	0	0	0	0	1	0	1
MENINGITIS	0	0	0	0	1	0	1	0
C.V. ARREST	0	0	0	0	0	1	0	1
ACUTE HEPATIC NEC.	0	0	0	0	1	0	1	0
RENAL INSUFF.	0	0	0	0	0	1	0	1
SIDS	0	0	0	0	2	2	2	2
SEPTIC SHOCK	0	0	0	0	1	0	1	0
PREMATURITY	0	0	0	0	1	0	1	0
UNKNOWN	0	0	0	0	1	1	1	1
TOTAL	7	5	1	3	9	6	17	14

STILLBIRTHS BY CAUSE, ETHNICITY AND SEX - 1986

CAUSE OF STILLBIRTH	INDIAN		INUIT		OTHER		TOTAL	
	M	F	M	F	M	F	M	F
SPONTANEOUS ABORT.	0	0	0	0	0	1	0	1
PREMATURITY	0	0	1	2	1	1	2	3
ABRUPTIO PLACENTA	0	0	4	1	0	0	4	1
CORD ACCIDENT	0	1	0	0	1	0	1	1
UNSPECIFIED COND. ORIG. PERINATAL	0	0	0	3	2	0	2	3
HYPOXIA	0	0	0	0	0	1	0	1
INTRAUTERIN INFECT	0	1	0	0	0	0	0	1
TOTAL	0	2	5	6	4	3	9	11

MATERNAL AGE GROUPS - 1986

	LIVEBIRTHS														STILLBIRTHS						
	14-19 yr.		20-24		25-29		30-34		35-39		40-44		TOTAL		15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	TOTAL
	LBW	#	LBW	#	LBW	#	LBW	#	LBW	#	LBW	#	LBW	#							
MACKENZIE ZONE																					
Indian	1	30	2	53	2	40	1	21	0	4	0	0	6	148	0	0	1	1	0	0	2
Inuit	3	42	4	56	2	37	0	14	1	4	0	0	10	153	0	0	0	0	0	0	0
Other	2	35	12	105	8	136	1	86	1	24	0	4	24	390	0	2	2	1	0	1	6
TOTAL	6	107	18	214	12	213	2	121	2	32	0	4	40	691	0	0	0	0	0	0	0
INUVIK ZONE																					
Indian	1	15	1	26	2	29	1	11	0	3	0	0	5	84	0	0	0	0	0	0	0
Inuit	1	12	4	38	1	20	1	9	0	2	0	0	7	81	1	1	0	0	0	1	3
Other	0	7	2	24	4	30	1	17	0	6	0	1	7	85	0	0	0	0	1	0	1
TOTAL	2	34	7	88	7	79	3	37	0	11	0	1	19	250	0	0	0	0	0	0	0
BAFFIN ZONE																					
Indian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inuit	7	96	4	105	7	52	2	27	3	13	0	5	23	298	0	1	3	0	1	0	5
Other	0	1	0	3	1	14	2	18	0	5	0	0	3	41	0	0	0	0	0	0	0
TOTAL	7	97	4	108	8	66	4	45	3	18	0	5	26	339	0	0	0	0	0	0	0
KEEWATIN ZONE																					
Indian	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inuit	0	47	6	69	5	36	1	18	1	7	0	4	13	181	1	1	0	1	0	0	3
Other	0	0	0	1	0	4	0	11	0	1	0	0	0	17	0	0	0	0	0	0	0
TOTAL	0	47	6	70	5	40	1	29	1	8	0	4	13	198	0	0	0	0	0	0	0
TOTAL N.W.T.	15	285	35	480	32	398	10	232	6	69	0	14	98	1478	2	5	6	3	2	2	20


BIRTHS & DEATHS
BIRTHS
DEATHS
(28.3)
(4.6)
Birth Rate and Crude Death Rate
per 1 000, logarithmic scale
100
90
80
70
60
50
40
30
20
10
9
8
7
6
5
4
3
2
1
71
72
73
74
75
76
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78
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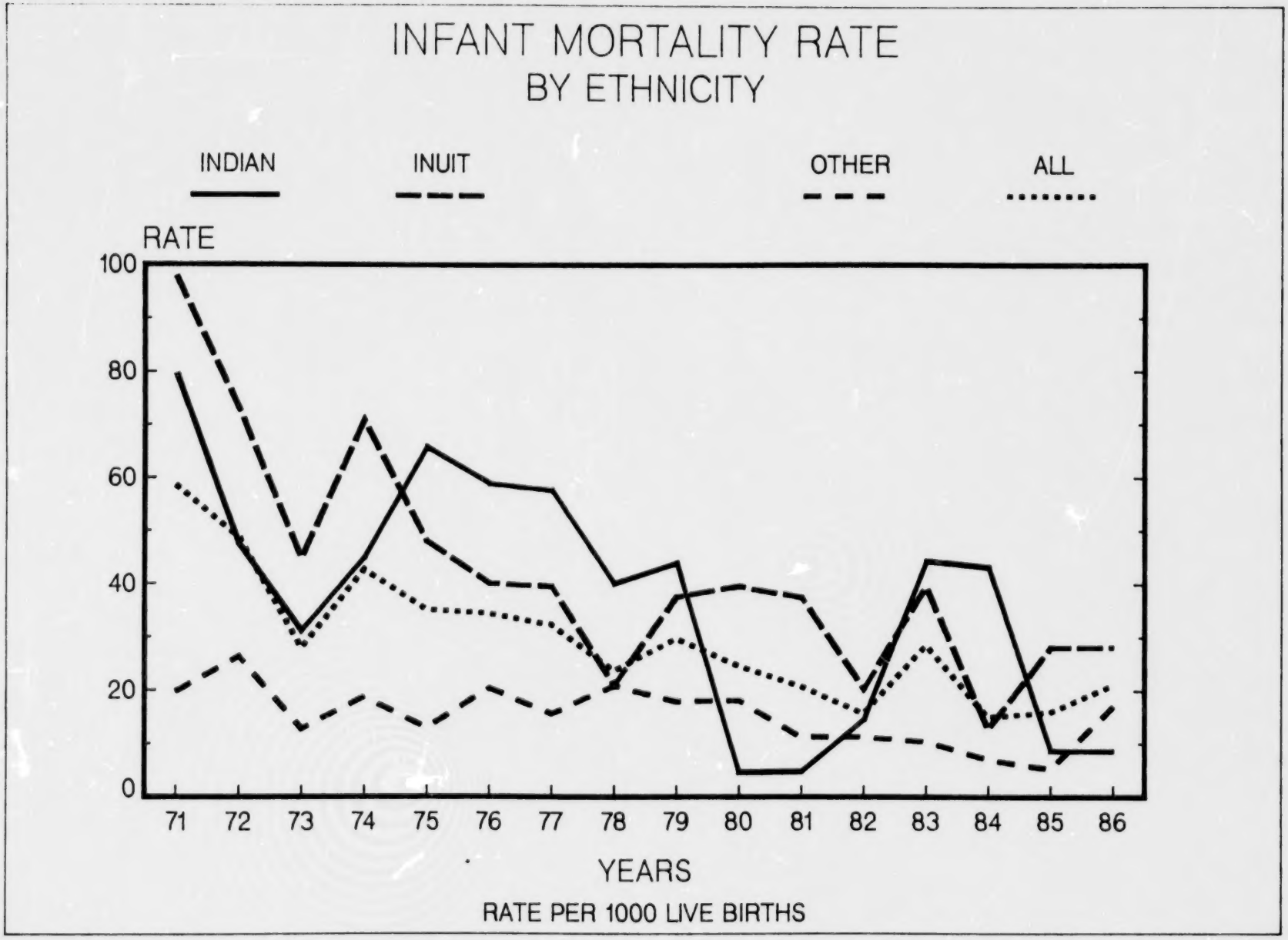
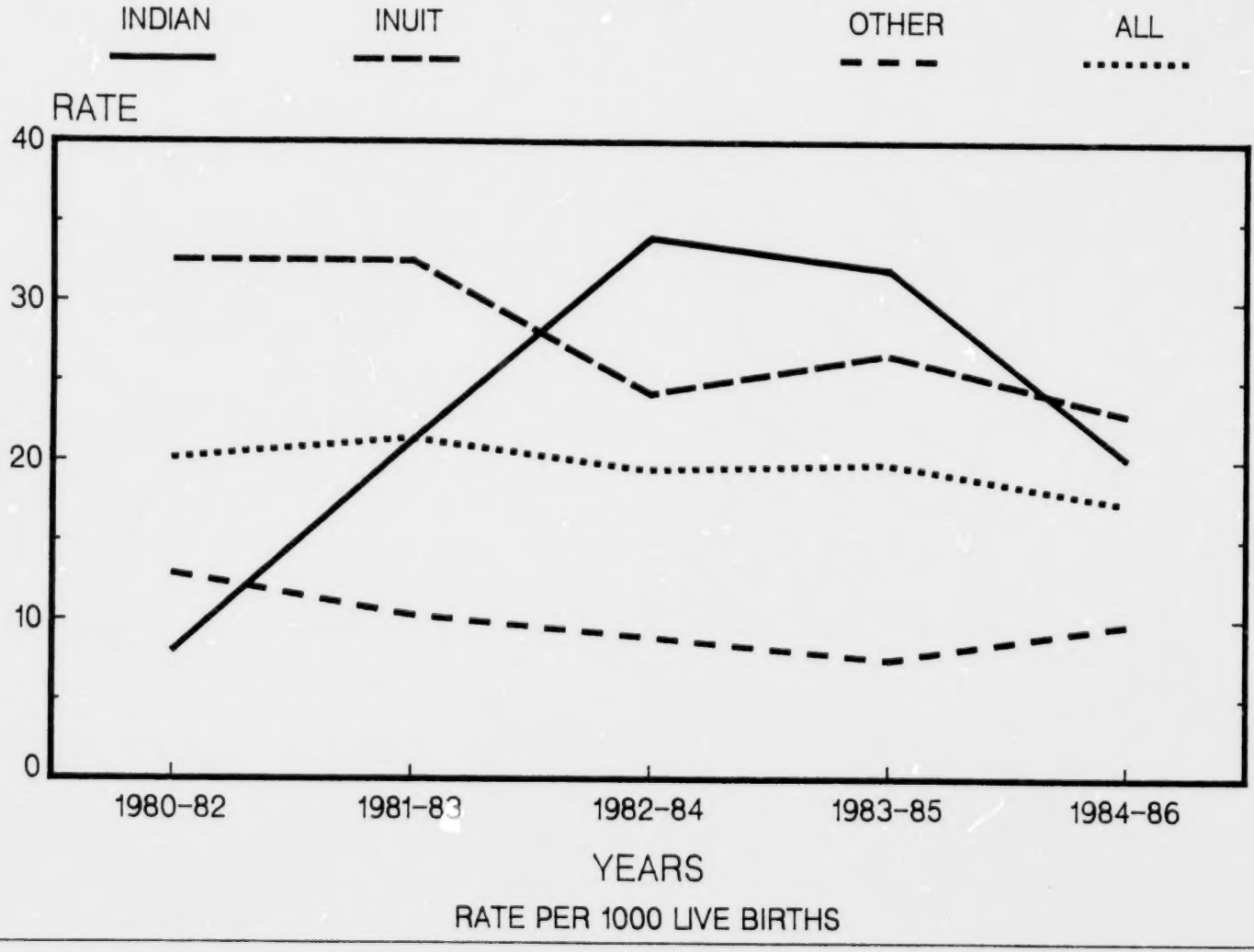
80
81
82
83
84
85
86


INFANT MORTALITY RATE
BY ETHNICITY
INDIAN
INUIT
OTHER
ALL
RATE
100
80
60
40
20
0
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
YEARS
RATE PER 1000 LIVE BIRTHS

INFANT MORTALITY RATE - BY ETHNICITY
3 YEAR MOVING AVERAGE



INDIAN AND INUIT HEALTH CAREERS PROGRAM

In 1986, the Program assisted twenty-seven (27) native students from the Northwest Territories in accessing health careers studies in post-secondary institutions and bridging programs. Although a few students dropped out due to health and various reasons, the majority of the students are doing well.

A Health Careers Advisor was recruited from Norman Wells and trained by the Medical Services Branch. The position was co-funded by the Branch and the Public Service Commission's Northern Careers Program. Part of the Health Careers Advisor's 1986 training included a National Networking Conference in Ottawa in June 1986 and visiting Old Sun College in Alberta. The trainee will be assuming the responsibilities of the position as of February 1, 1987 and will become an indeterminate employee of the Department.

Indian and Inuit Health Careers developed a Territorial poster and brochure which is distinctly unique to the North. The Territorial thrust of these materials will definitely focus health science professionals as role models to northern native students in the Northwest Territories.

The Program assisted Old Sun College in a recruitment drive along the Mackenzie Valley and interviewed eighteen (18) Indian and Inuit students.

The student employment program proved to be a success as the entire allotment of seventeen (17) person months were utilized by the participating Zones. A mechanism was developed to help the Zone Personnel Officers access the Indian and Inuit Health Careers Student Employment resources.

The Program established a liaison with most federal and territorial departments, native organizations and other interested organizations who were involved in assisting native people in the Northwest Territories become

health science professionals. This liaison will continue and should enhance the future direction of the Program.

1986 was an uncertain year for the Indian and Inuit Health Careers Program as the Program was under national review. But, as the Treasury Board decision has been favourable, the Program will continue its existence and continue to be funded at the same levels.

HEALTH MANAGEMENT INFORMATION SYSTEM

Community Health Information System

The Community Health Information System was designed to facilitate an information gathering system primarily within such health facilities as nursing stations, health centres and health stations. The system is, however, tied directly to hospitals, medical clinical operations and other health and administration related functions.

The objectives of the Community Health Information System are:

1. to implement an effective health management information system in order to quantify objectives and standards pertinent to health care planners and providers;
2. to acquire, process and store data and disseminate information in accordance with needs;
3. to provide management with an operational control by concerning itself with the efficiency, quality and effectiveness of programs and its use of resources in comparison against standards.

The Community Health Services Report Form is designed to facilitate the recording of treatment oriented inpatient and outpatient activities, and the recording of public health activities and administrative duties. It is estimated that approximately 300,000 forms are being completed at the field level per annum throughout communities North of 60°, on a population figure of approximately 52,000.

The immediate capabilities of this system allow for suitable feedback to the individual nursing stations, such as community profile data; incidence of disease by age, community and sex; ICD-9 level by Zone and

nursing station; practitioner profiles by contract; and use of public health programs.

The Community Health Services Report Form is a multi-purpose input document which captures nursing services performed in the communities. This reporting allows for a systematic and comprehensive evaluation of all programs that fall under health services, and provides an increased knowledge and ultimately a better definition of health problems and issues.

The philosophy of community health nursing is to assist families and communities to attain the highest possible level of health, taking into consideration the social, ethnic, economical and geographical variations that exist. To develop methods of evaluating the effectiveness of programs, incidence and prevalence of disease and the utilization of public health services in a manner that health planners, communities and residents are able to recognize and ultimately identify the factors leading to these health problems is, therefore, of the utmost importance.

The Community Health Information System has completed its fifth year of operation. The information compiled has been used in areas such as capital and operational planning, as well as for providing historical and statistical data for the many research projects initiated throughout the Northwest Territories.

Activities recorded by nurses in the field and input into the automated Health Management Information System for the period January 1 - December 31, 1986 are summarized in the following tables and graphs.

Tables I - V identify the number of patients seen and services performed for active treatment and public health activities.

In the Northwest Territories 155,693 clients were seen with 278,316 services being performed by nurses in the nursing stations and health units.

As indicated under the heading of Active Treatment, 94,669 patients were seen and 137,206 services performed by nurses in nursing stations and health units throughout the Northwest Territories. This is an increase of 27,359 patients seen and 15,481 services performed as compared with 1985.

Public Health indicates 61,024 patients were seen and 141,110 services performed. Public Health consists of programs pertaining to maternal child health, infant health, pre-school health, school health, adult health, environmental surveillance, education, family planning, home visits, screening, immunization and communicable diseases. These figures show an increase of 16,204 patients seen and 225 services performed as compared with 1985 figures.

SUMMARY - NURSING STATION ACTIVITY

PERIOD: January 1 - December 31, 1986
ZONE: Region

ACTIVE TREATMENT	PATIENTS	SERVICES
1. Infectious & Parasitic Diseases	5,139	5,628
2. Neoplasms	152	189
3. Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	678	798
4. Diseases of the Blood and Blood-Forming Organs	748	844
5. Mental Disorders	1,931	2,446
6. Diseases of the Nervous System and Sense Organs	16,575	20,779
7. Diseases of the Circulatory System	2,233	2,906
8. Diseases of the Respiratory System	24,978	37,735
9. Diseases of the Digestive System	5,938	9,033
10. Diseases of the Genitourinary System	6,714	9,466
11. Complications of Pregnancy, Childbirth, and the Puerperium	484	693
12. Diseases of the Skin and Subcutaneous Tissue	6,126	9,199
13. Diseases of the Musculoskeletal System and Connective Tissue	4,796	6,892
14. Congenital Anomalies	128	165
15. Certain Conditions Originating in the Perinatal Period	87	142
16. Symptoms, Signs, and Ill-Defined Conditions	7,336	14,273
17. Injury and Poisoning	10,626	16,018
Sub-Total	94,669	137,206

PUBLIC HEALTH		
1. Public Health General	23,528	38,171
2. Administration	0	30,742
3. Education	1,000	2,388
4. Maternal Child Health	6,045	8,548
5. Infant Health	5,571	13,268
6. Pre-School Health	5,246	8,290
7. School Health	715	1,476
8. Adult Health	2,608	5,668
9. Environmental Surveillance	1	49
10. Family Planning	2,785	3,624
11. Home Visits	3,163	6,516
12. Screening	510	4,982
13. Immunization	9,490	15,965
14. Communicable Diseases	362	1,423
Sub-Total	61,024	141,110
TOTAL	155,693	278,316

SUMMARY - NURSING STATION ACTIVITY

PERIOD: January 1 - December 31, 1986
ZONE: Inuvik

ACTIVE TREATMENT	PATIENTS	SERVICES
1. Infectious & Parasitic Diseases	785	892
2. Neoplasms	40	49
3. Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	205	243
4. Diseases of the Blood and Blood-Forming Organs	135	149
5. Mental Disorders	503	616
6. Diseases of the Nervous System and Sense Organs	2,178	2,607
7. Diseases of the Circulatory System	466	659
8. Diseases of the Respiratory System	4,079	5,718
9. Diseases of the Digestive System	1,135	1,692
10. Diseases of the Genitourinary System	1,374	1,894
11. Complications of Pregnancy, Childbirth, and the Puerperium	87	128
12. Diseases of the Skin and Subcutaneous Tissue	1,076	1,494
13. Diseases of the Musculoskeletal System and Connective Tissue	865	1,250
14. Congenital Anomalies	30	42
15. Certain Conditions Originating in the Perinatal Period	28	39
16. Symptoms, Signs, and Ill-Defined Conditions	1,339	2,616
17. Injury and Poisoning	2,487	3,729
Sub-Total	16,812	23,817

PUBLIC HEALTH		
1. Public Health General	3,309	6,077
2. Administration	0	5,516
3. Education	325	850
4. Maternal Child Health	1,085	1,630
5. Infant Health	846	1,998
6. Pre-School Health	1,791	2,578
7. School Health	199	354
8. Adult Health	575	1,118
9. Environmental Surveillance	0	12
10. Family Planning	528	678
11. Home Visits	1,088	2,099
12. Screening	106	670
13. Immunization	1,739	3,000
14. Communicable Diseases	96	413
Sub-Total	11,687	26,993
TOTAL	28,499	50,810

SUMMARY - NURSING STATION ACTIVITY

PERIOD: January 1 - December 31, 1986
ZONE: Mackenzie

ACTIVE TREATMENT	PATIENTS	SERVICES
1. Infectious & Parasitic Diseases	1,663	1,788
2. Neoplasms	36	48
3. Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	149	168
4. Diseases of the Blood and Blood-Forming Organs	159	174
5. Mental Disorders	401	484
6. Diseases of the Nervous System and Sense Organs	4,782	5,839
7. Diseases of the Circulatory System	513	672
8. Diseases of the Respiratory System	7,889	11,284
9. Diseases of the Digestive System	2,069	3,013
10. Diseases of the Genitourinary System	1,828	2,503
11. Complications of Pregnancy, Childbirth, and the Puerperium	127	187
12. Diseases of the Skin and Subcutaneous Tissue	1,759	2,544
13. Diseases of the Musculoskeletal System and Connective Tissue	1,653	2,283
14. Congenital Anomalies	42	50
15. Certain Conditions Originating in the Perinatal Period	24	42
16. Symptoms, Signs, and Ill-Defined Conditions	2,409	4,370
17. Injury and Poisoning	3,339	4,726
Sub-Total	28,842	40,175

PUBLIC HEALTH		
1. Public Health General	5,596	8,528
2. Administration	0	10,115
3. Education	343	870
4. Maternal Child Health	1,595	2,360
5. Infant Health	1,660	5,096
6. Pre-School Health	1,584	2,979
7. School Health	237	661
8. Adult Health	635	1,496
9. Environmental Surveillance	1	34
10. Family Planning	905	1,097
11. Home Visits	891	2,264
12. Screening	200	2,779
13. Immunization	4,521	7,523
14. Communicable Diseases	158	518
Sub-Total	18,326	46,320
TOTAL	47,168	86,495

SUMMARY - NURSING STATION ACTIVITY

PERIOD: January 1 - December 31, 1986
ZONE: Keewatin

ACTIVE TREATMENT	PATIENTS	SERVICES
1. Infectious & Parasitic Diseases	1,456	1,591
2. Neoplasms	34	37
3. Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	164	198
4. Diseases of the Blood and Blood-Forming Organs	212	233
5. Mental Disorders	391	476
6. Diseases of the Nervous System and Sense Organs	5,442	6,915
7. Diseases of the Circulatory System	742	898
8. Diseases of the Respiratory System	6,573	10,660
9. Diseases of the Digestive System	1,115	1,739
10. Diseases of the Genitourinary System	1,546	2,313
11. Complications of Pregnancy, Childbirth, and the Puerperium	111	157
12. Diseases of the Skin and Subcutaneous Tissue	1,496	2,411
13. Diseases of the Musculoskeletal System and Connective Tissue	971	1,458
14. Congenital Anomalies	43	48
15. Certain Conditions Originating in the Perinatal Period	22	33
16. Symptoms, Signs, and Ill-Defined Conditions	1,661	3,142
17. Injury and Poisoning	2,208	3,311
Sub-Total	24,187	35,620

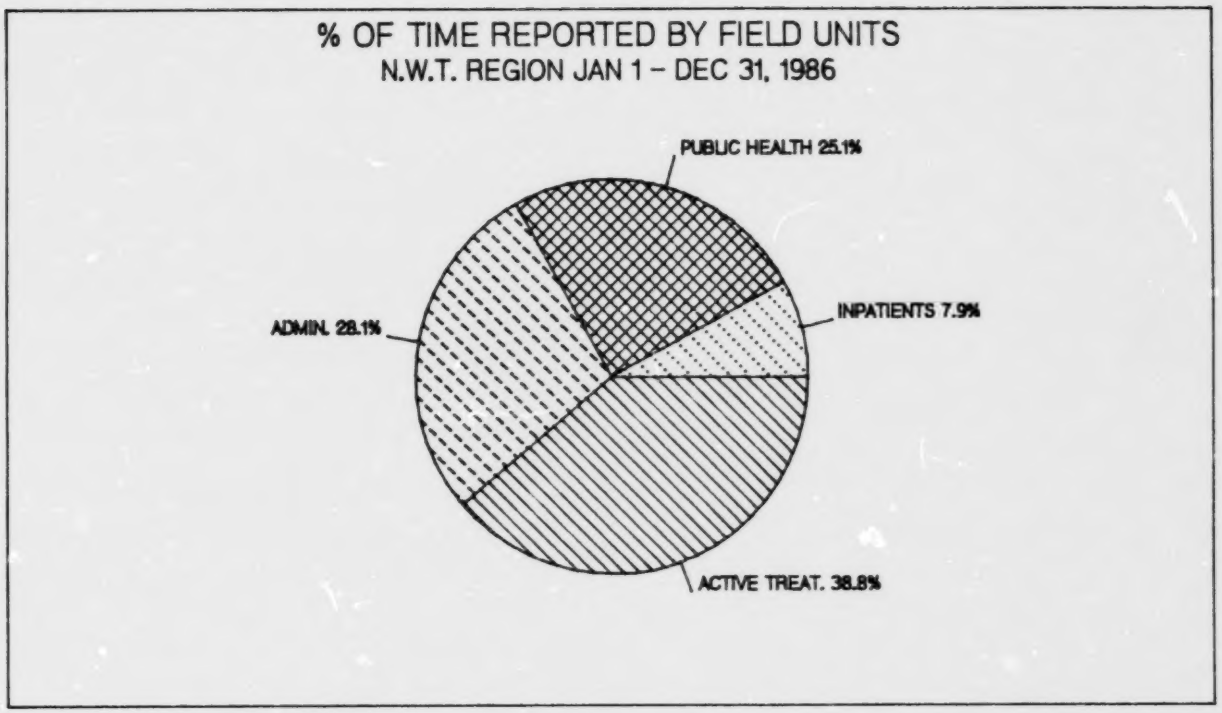
PUBLIC HEALTH		
1. Public Health General	7,805	11,122
2. Administration	0	6,051
3. Education	97	147
4. Maternal Child Health	1,468	1,785
5. Infant Health	1,421	2,331
6. Pre-School Health	320	402
7. School Health	95	155
8. Adult Health	607	1,069
9. Environmental Surveillance	0	0
10. Family Planning	322	377
11. Home Visits	276	440
12. Screening	60	310
13. Immunization	1,180	1,887
14. Communicable Diseases	37	213
Sub-Total	13,688	26,289
TOTAL	37,875	61,909

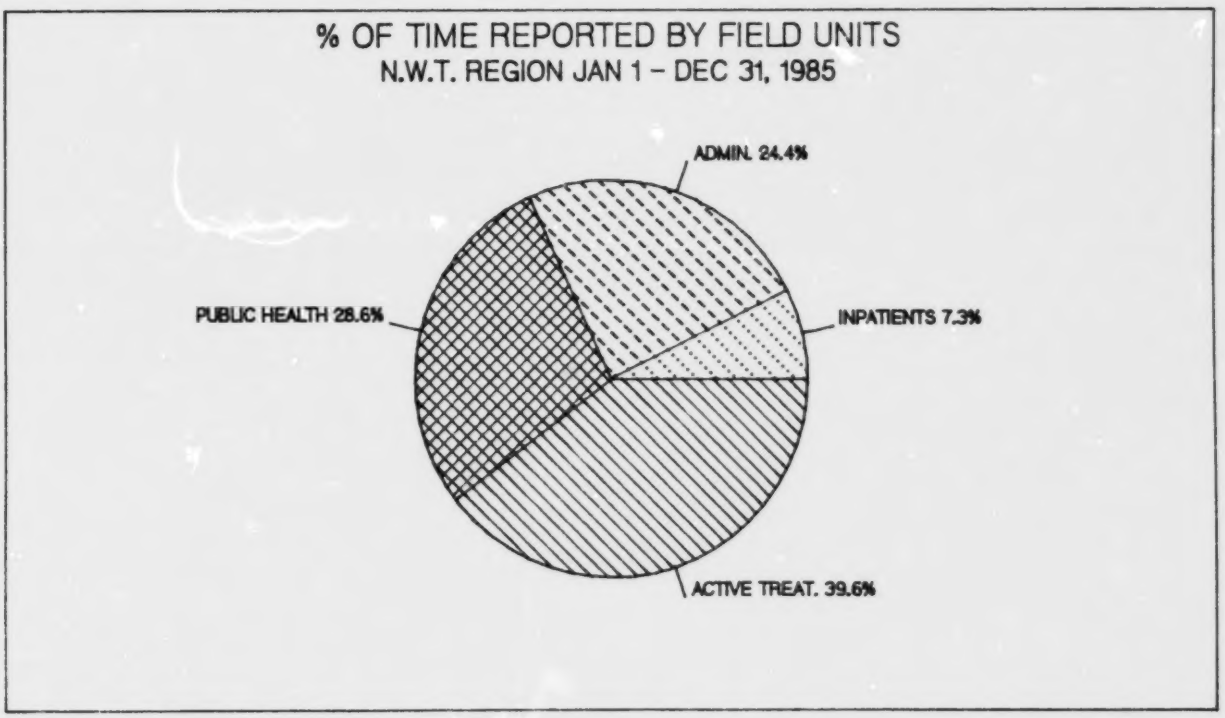
SUMMARY - NURSING STATION ACTIVITY

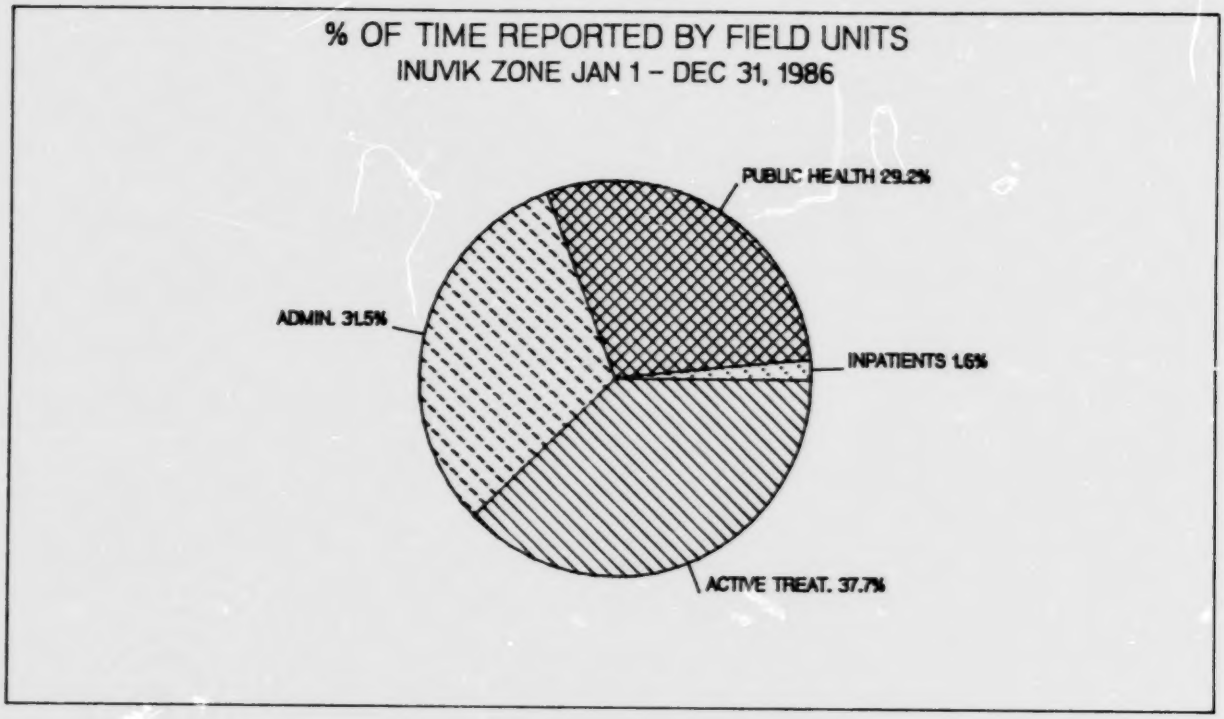
PERIOD: January 1 - December 31, 1986
ZONE: Baffin

ACTIVE TREATMENT	PATIENTS	SERVICES
1. Infectious & Parasitic Diseases	1,235	1,357
2. Neoplasms	42	55
3. Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	160	189
4. Diseases of the Blood and Blood-Forming Organs	242	288
5. Mental Disorders	636	870
6. Diseases of the Nervous System and Sense Organs	4,173	5,418
7. Diseases of the Circulatory System	512	677
8. Diseases of the Respiratory System	6,437	10,073
9. Diseases of the Digestive System	1,619	2,589
10. Diseases of the Genitourinary System	1,966	2,756
11. Complications of Pregnancy, Childbirth, and the Puerperium	159	221
12. Diseases of the Skin and Subcutaneous Tissue	1,795	2,750
13. Diseases of the Musculoskeletal System and Connective Tissue	1,307	1,901
14. Congenital Anomalies	13	25
15. Certain Conditions Originating in the Perinatal Period	13	28
16. Symptoms, Signs, and Ill-Defined Conditions	1,927	4,145
17. Injury and Poisoning	2,592	4,252
Sub-Total	24,828	37,594

PUBLIC HEALTH		
1. Public Health General	6,818	12,444
2. Administration	0	9,060
3. Education	235	521
4. Maternal Child Health	1,897	2,773
5. Infant Health	1,644	3,843
6. Pre-School Health	1,551	2,331
7. School Health	184	306
8. Adult Health	791	1,985
9. Environmental Surveillance	0	3
10. Family Planning	1,030	1,472
11. Home Visits	908	1,713
12. Screening	144	1,223
13. Immunization	2,050	3,555
14. Communicable Diseases	71	279
Sub-Total	17,323	41,508
TOTAL	42,151	79,102


% OF TIME REPORTED BY FIELD UNITS
N.W.T. REGION JAN 1 – DEC 31, 1986
PUBLIC HEALTH 25.1%
INPATIENTS 7.9%
ADMIN. 28.1%
ACTIVE TREAT. 38.8%


% OF TIME REPORTED BY FIELD UNITS
N.W.T. REGION JAN 1 – DEC 31, 1985
ADMIN. 24.4%
PUBLIC HEALTH 28.6%
INPATIENTS 7.3%
ACTIVE TREAT. 39.6%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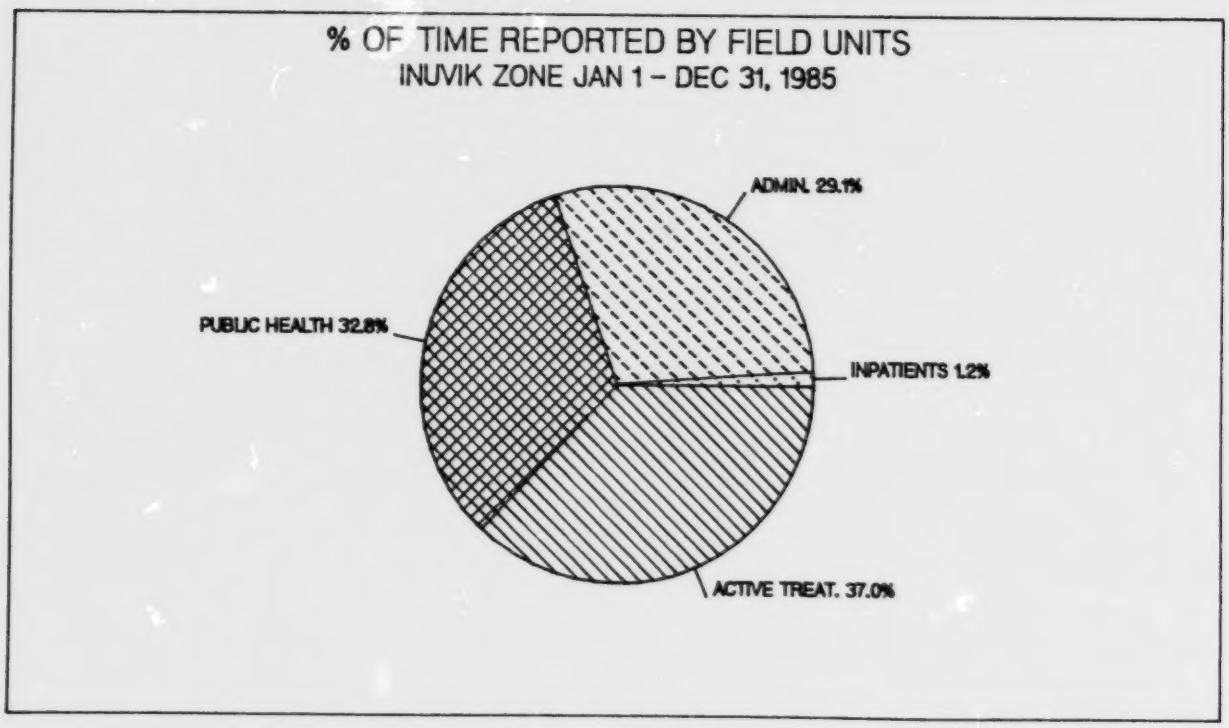
PUBLIC HEALTH 29.2%
ADMIN. 31.5%
INPATIENTS 1.6%
ACTIVE TREAT. 37.7%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INPATIENTS 1.2%
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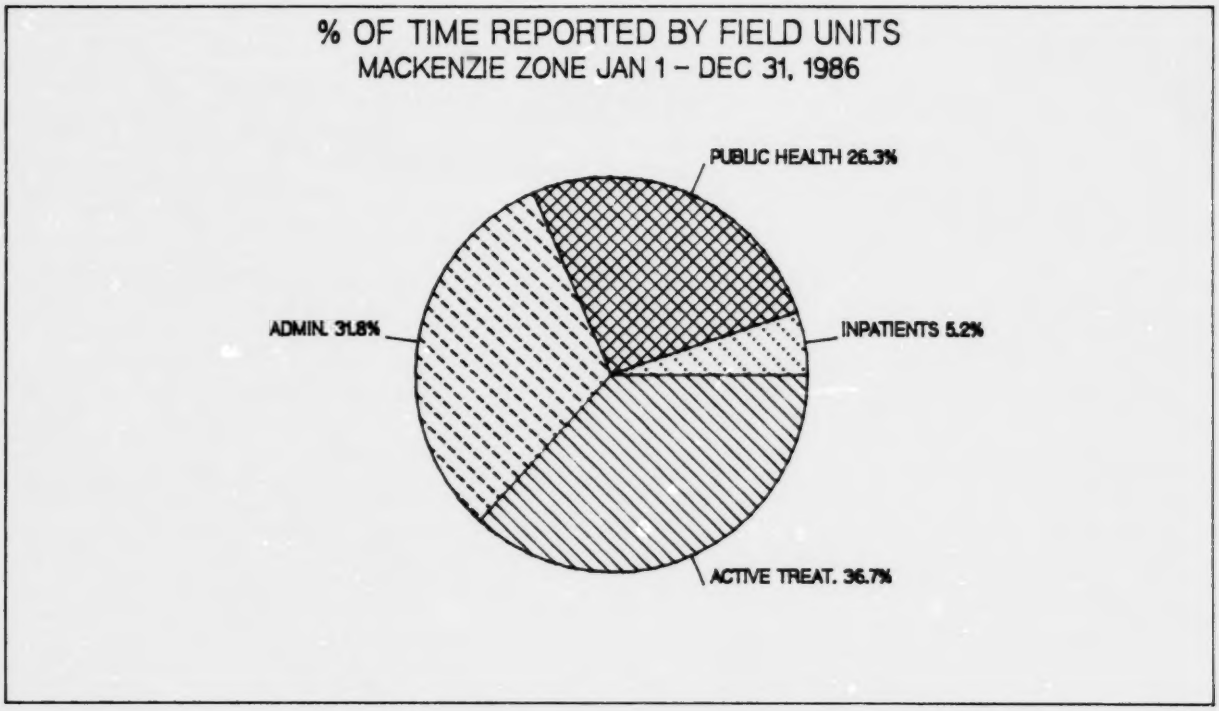
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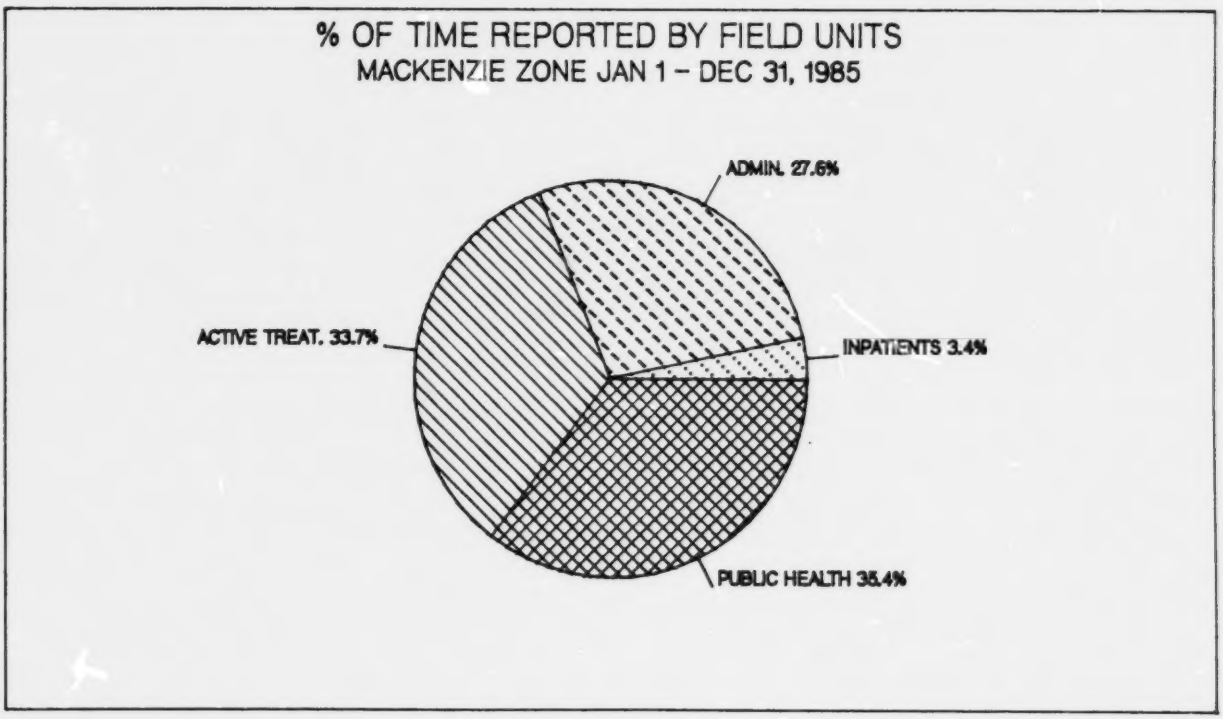
PUBLIC HEALTH 26.3%
INPATIENTS 5.2%
ACTIVE TREAT. 36.7%
ADMIN. 31.8%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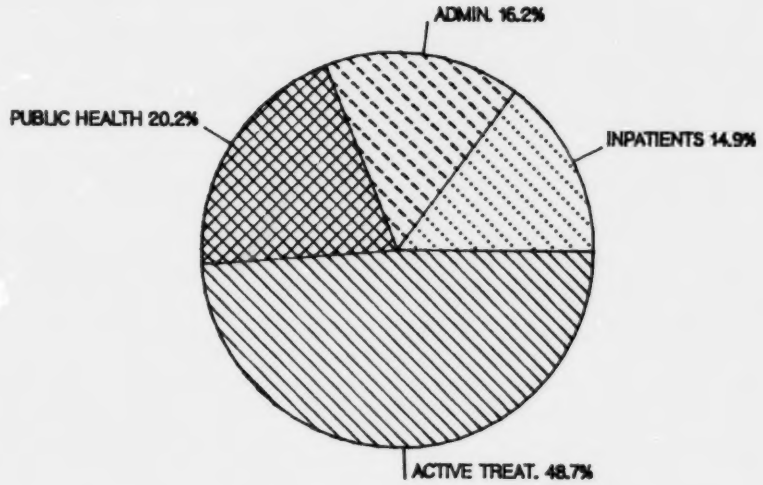
MACKENZIE ZONE JAN 1 – DEC 31, 1985
ADMIN. 27.6%
INPATIENTS 3.4%
PUBLIC HEALTH 35.4%
ACTIVE TREAT. 33.7%

% OF TIME REPORTED BY FIELD UNITS
KEEWATIN ZONE JAN 1 – DEC 31, 1986



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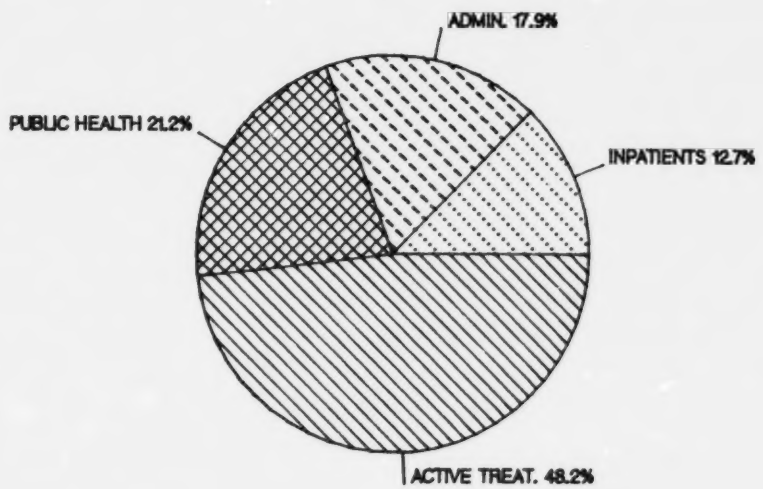
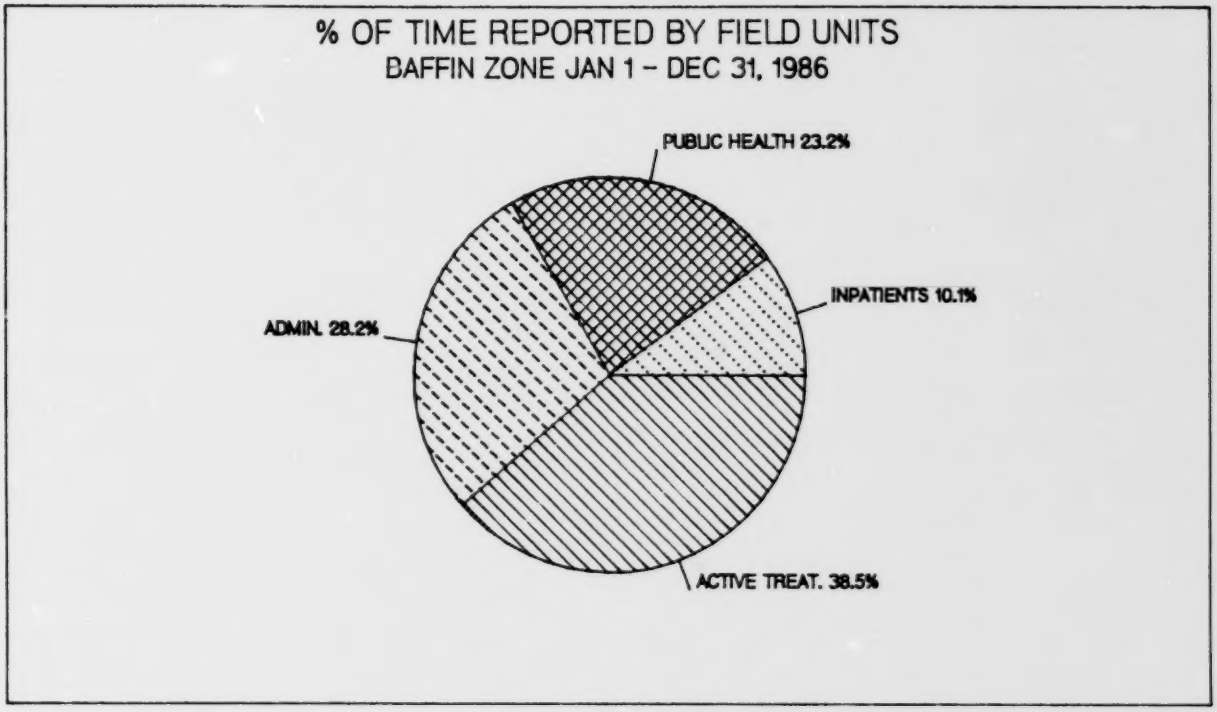
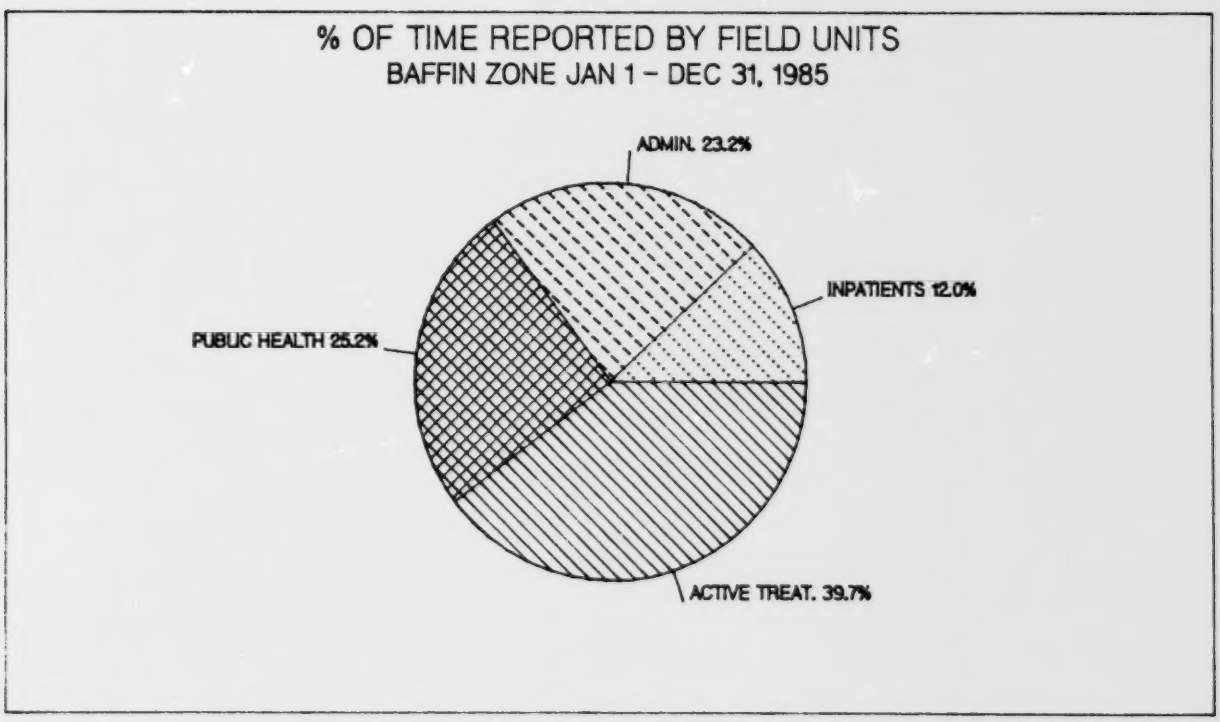



% OF TIME REPORTED BY FIELD UNITS
BAFFIN ZONE JAN 1 - DEC 31, 1986
PUBLIC HEALTH 23.2%
INPATIENTS 10.1%
ADMIN. 28.2%
ACTIVE TREAT. 38.5%


% OF TIME REPORTED BY FIELD UNITS
BAFFIN ZONE JAN 1 - DEC 31, 1985
ADMIN. 23.2%
INPATIENTS 12.0%
PUBLIC HEALTH 25.2%
ACTIVE TREAT. 39.7%

NURSING SERVICES

Community health nursing activities reporting is being revised in conjunction with other aspects of the Health Management Information System. Public health and treatment activities will be more clearly defined to accurately reflect the broad spectrum of nursing activities and functions. This will result in a more efficient system of collecting and reporting statistical data. The revised system will be field tested and evaluated prior to complete implementation.

The Community Health Nursing Manual is being completed for printing and distribution.

Nursing has been actively involved in facilitating the continuity of nursing services during the process of transferring Federal Health Services to the Government of the Northwest Territories.

Community Health nursing services continue to be focused on the family unit throughout the life cycle. The health of mothers and infants, beginning with pre-natal care remains a priority, usually through regularly scheduled clinics. Pre-natal classes in larger communities continue to be well attended and accepted, especially by younger prospective parents. In smaller communities one to one teaching achieves the best results. The trend towards fathers attending pre-natal classes and deliveries continues.

Women are increasingly reluctant to leave their communities to deliver their babies. Many factors must be considered and weighed when recommending to the woman an appropriate health care setting for her delivery. These factors include the shortage of nurses with midwifery training and/or experience and whether or not the mother is considered high risk. Pre-natal classes continue to be held according to need and interest.

The health of infants and pre-school children continues to be a priority. They are followed regularly through scheduled Well Child Clinics. Attendance in the Settlements tends to be more consistent than in the larger, more transient communities.

Emphasis is placed on breast feeding, appropriate nutrition, immunization, development and safety. Anticipatory guidance and parent teaching is provided especially to inexperienced parents. Children perceived to be at increased risk are followed more closely.

The focus of the school health program is to support parents and teachers in promoting healthy growth and development; stimulate interest and self responsibility in children and youth; develop sound personal health and safety practices; and provide for early detection and intervention to correct health problems.

Children are offered a health and developmental assessment on entering school: immunization; screening for hearing and vision at selected ages; and health counselling throughout school life. The nurse is also the resource person available to the teacher in health promotion and health education matters.

Adult health services include: Well Women Clinics; PAP smear screening; immunization maintenance; and promotion of self care and personal responsibility for health. Other adult health programs such as Well Men Clinics are gradually being introduced in some areas.

Nurses continue to emphasize nutrition especially with pre-natal women, infants and pre-schoolers. Breast feeding continues to be well accepted and traditional foods are being integrated with store food. Nutrition counselling is mainly one to one and often a part of other activities. There is active participation in Nutrition Month.

Severe dental caries in pre-school children continue to be a problem. Many of this age group have to be subjected to multiple extractions under general anesthesia for a preventable condition. Limiting the amount of sugar-loaded food and drink children are given, or allowed to consume, would result in fewer services of this kind being needed.

Immunization from birth to adolescence is usually well maintained. However, continuing effort is required at all levels to maintain and improve the current position especially in the adult population. Child immunization clinics are usually well attended, adult clinics less so.

The hepatitis B mass immunization of susceptible individuals is almost completed, and is now included in the ongoing immunization program.

Treatment, follow up, counselling and education of persons with and the contacts of persons with communicable diseases, continues to demand a large segment of nursing time.

There continues to be a high incidence of sexually transmitted diseases, especially gonorrhea and chlamydia. A Northwest Territories specific educational prgramme is being developed to respond to the increasing concern about AIDS.

Nurses have been heavily involved in the increased tuberculosis program activity and the revision of the computerized surveillance program. This was generated by a number of new cases of tuberculosis occurring in Mackenzie Zone.

Chronic diseases are increasing and affecting all age groups. Nursing services are directed towards monitoring for changing needs, client and family support, counselling, education and teaching. Concerns continue to be raised about noise and disease-related deafness in young people and as

a result, heavy demands for audiology services are expected to continue. Measures to reduce environmental noise need to be addressed by individuals and communities.

Respiratory illness and chronic otitis media (middle ear infection) continue to be problems. The relationship of second hand smoke to both conditions has been shown for some time. The responsibility of adults to provide a smoke free home and community environment for their children needs increased emphasis.

The number of deaths from chronic lung disease and cancer in some communities tends to raise concerns and awareness. Unfortunately these concerns are directed to unrealistic expectations for successful treatment rather than prevention through changes in personal smoking habits. Individuals and communities cannot avoid responsibility for the consequences of their negative health practices.

Senior citizens are a growing segment of the population, and receive services based on individual needs. Traditionally, elders have been absorbed into the extended family, but some communities are increasingly looking to institutions and agencies to provide care. Community social support services are limited. Nurses see those persons with health problems in the clinic setting, but due to time restraints, home visiting is based on individual need.

Some communities are beginning to develop local initiatives and responses to deal with problems arising from differences between traditional values and contemporary issues. There is increased awareness and concern about child sexual abuse, sexually-transmitted diseases, AIDS, teenage pregnancies, substance abuse and alcohol-related aggression and violence.

These communities are becoming active in developing local lay support systems. We look forward to community developments in this area.

Accidents from all terrain vehicles and skidoos, and the sniffing of gasoline and propane are continuing problems in many areas. Nurses and community health representatives have conducted safety and teaching programs using radio and family information sessions.

Water sampling and ongoing surveillance is continued between community visits of the Environmental Health Officers. The increasing work load on field staff is of concern in some areas.

In larger centres there has been an increased demand for medicals, audiograms, and other tests for employees of various Federal Departments.

Health education and health promotion is intrinsic in all public health or treatment contacts with individual clients. Most formalized health education activities are centred around specific monthly themes or specific problems or concerns.

Treatment services continue to be a priority demand, exceeding our expectations in all communities. These increased demands reduce the time, emotional and physical energy available for public health activities; increase client and community dependance; and contribute to staff turnover.

REPORTED IMMUNIZATION STATUS - 1986

REGION - ALL ETHNICITIES

MIDYEAR POPULATION	IMMUNIZATION AGENTS	% FULLY IMMUNIZED	% PARTIALLY IMMUNIZED
INFANT 0-1 1,433*	D.P.T.	84.85	13.26
	Polio	86.39	11.37
	Measles	46.41	
	B.C.G.	51.92	
PRE-SCHOOL 1-4 5,291*	D.P.T.	88.30	9.58
	Polio	88.70	9.30
	Measles	89.95	
	Mumps	90.68	
	Rubella	90.40	
	B.C.G.	54.26	
SCHOOL-AGE 5-19 14,595*	Diphtheria/Tetanus	91.85	6.44
	Polio	91.34	6.58
	Measles	77.16	
	Mumps	60.60	
	Rubella - Females 10 years & over	16.90	
	Rubella - All others in age group	59.86	
	B.C.G.	.82	
	Smallpox		

*Population figures are based on statistics received from the nursing stations.

REPORTED IMMUNIZATION STATUS - 1986

INDIAN

MIDYEAR POPULATION	IMMUNIZATION AGENTS	% FULLY IMMUNIZED	% PARTIALLY IMMUNIZED
INFANT 0-1 252*	D.P.T.	66.27	23.02
	Polio	69.84	17.86
	Measles	32.14	
	B.C.G.	67.06	
PRE-SCHOOL 1-4 895*	D.P.T.	81.01	11.84
	Polio	81.79	11.17
	Measles	88.60	
	Mumps	88.60	
	Rubella	88.38	
	B.C.G.	78.32	
SCHOOL-AGE 5-19 2,615*	Diphtheria/Tetanus	90.78	7.95
	Polio	90.29	7.84
	Measles	87.76	
	Mumps	78.09	
	Rubella - Females 10 years & over	25.01	
	Rubella - All others in age group	62.41	
	B.C.G.	78.62	
	Smallpox		

*Population figures are based on statistics received from the nursing stations.

REPORTED IMMUNIZATION STATUS - 1986

INUIT

MIDYEAR POPULATION	IMMUNIZATION AGENTS	% FULLY IMMUNIZED	% PARTIALLY IMMUNIZED
INFANT 0-1 671*	D.P.T.	85.99	12.52
	Polio	87.78	9.99
	Measles	41.88	
	B.C.G.	79.73	
PRE-SCHOOL 1-4 2,426*	D.P.T.	90.52	8.40
	Polio	91.22	8.04
	Measles	88.99	
	Mumps	92.17	
	Rubella	92.17	
	B.C.G.	78.07	
SCHOOL-AGE 5-19 6,656*	Diphtheria/Tetanus	94.25	2.90
	Polio	93.95	3.02
	Measles	72.75	
	Mumps	63.99	
	Rubella - Females 10 years & over	16.48	
	Rubella - All others in age group	52.25	
	B.C.G.	75.60	
	Smallpox		

*Population figures are based on statistics received from the nursing stations.

REPORTED IMMUNIZATION STATUS - 1986

OTHER

MIDYEAR POPULATION	IMMUNIZATION AGENTS	% FULLY IMMUNIZED	% PARTIALLY IMMUNIZED
INFANT 0-1 510*	D.P.T.	92.55	9.41
	Polio	92.75	10.00
	Measles	59.41	
	B.C.G.	7.84	
PRE-SCHOOL 1-4 1,970*	D.P.T.	88.88	10.00
	Polio	88.73	10.00
	Measles	91.73	
	Mumps	89.80	
	Rubella	89.14	
	B.C.G.	14.01	
SCHOOL-AGE 5-19 5,324*	Diphtheria/Tetanus	89.35	10.12
	Polio	88.60	10.41
	Measles	77.50	
	Mumps	67.52	
	Rubella - Females 10 years & over	13.45	
	Rubella - All others in age group	68.11	
	B.C.G.	33.00	
	Smallpox		

*Population figures are based on statistics received from the nursing stations.

COORDINATED HOME CARE

Coordinated Home Care is a hospital based program of coordinated medical, social and home support services. It encourages and assists individuals, especially elderly and disabled persons, to maintain personal and independent lifestyles in home environments for as long as possible.

Services provided through the program are dependent upon the needs of the community and can include professional services such as physician services, nursing, physiotherapy, occupational therapy, homemaker services, meals-on-wheels, equipment loan and neighbour services such as handyman, transportation, errand running and friendly visiting.

All residents of the Northwest Territories are covered by the program. However, priority is given to the elderly, the chronically ill and the disabled. Recipients must demonstrate a need for at least one professional/home support service based on a clinical, functional and social assessment performed by the Home Care Coordinator.

The program is jointly funded by the Territorial Hospital Insurance Services of the Department of Health and the Department of Social Services.

There are no user fees charged to the recipients of Coordinated Home Care for nursing and medical entry services. A user fee may be charged by Social Services based on a sliding scale dependent on income. A nominal fee is charged for meals-on-wheels.

EXTENDED MEDICAL BENEFITS

Extended Medical Benefits are intended to assist Non-native and Metis residents of the Northwest Territories who do not have access to an employer plan, with costs related to the investigation, treatment, maintenance and/or rehabilitation of certain long term chronic disease conditions. These conditions include cancer, cleft lip/palate, congenital anomalies and chronic disease of the urinary system, cystic fibrosis, diabetes mellitus, spina bifida, tuberculosis and chronic psychosis. In 1985 coverage was expanded to include cerebral palsy, cytomegalovirus, diabetes insipidus, multiple sclerosis and asthma up to 19 years of age.

The benefits provided are beyond the scope of Medicare/T.H.I.S. They include air and ground transportation, stipends for meals and accommodation costs, medical-surgical appliances, supplies and prosthetics, escort services, medical, institutional and other health services which are not covered by the Northwest Territories Health Care Plan, or through other means.

In 1986 the program was expanded to provide additional assistance to eligible persons whose employer plan benefits fall short of the Department of Health program.

EXTENDED CARE/CHRONIC CARE AND NURSING HOME CARE

Extended/Chronic Care and Nursing Home Care services, implemented in April 1983, are administered by the Department of Health, Government of the Northwest Territories, and are provided in approved hospitals in the Northwest Territories. The services are partially insured benefits under the Territorial Hospital Insurance Services Ordinance. If Extended/Chronic Care or Nursing Home clients cannot be accommodated in a Northwest Territories facility, the T.H.I.S. Board may make arrangements with a provincial institution to accommodate these patients, and may subsidize the costs in a manner equivalent to care provided in the Northwest Territories.

Extended/Chronic Care is defined as the level of care required by clients who require regular and continuous medical attention, highly skilled technical nursing supervision on a 24-hour basis, and special techniques for improvement and/or maintenance of function. Approved diagnostic facilities must be readily available.

Nursing Home Care is defined in general as the level of care required by clients who have advanced physical and/or mental illness that is reasonably stabilized and which is not expected to deteriorate in the near future (barring an accident or additional disease).

PHARMACARE

The Pharmacare Program for senior citizens was introduced by the Government of the Northwest Territories on July 1, 1979. It was established to provide prescription drug coverage for pharmaceutical products from an approved list, "The N.W.T. Pharmacare Formulary", to residents who were sixty-five years of age or more, and to Non-native and Metis residents not having access to an employer plan, who were diagnosed as having certain long term debilitating disease conditions.

"The Northwest Territories Pharmacare Formulary" is a listing of approximately 2,000 therapeutically effective drugs that have been approved as benefits under the program. It was compiled, and is subject to ongoing review, by the Northwest Territories Pharmacare Formulary Advisory Committee whose members, appointed by the Department of Health, represent the medical and pharmaceutical professions. Use of the Formulary ensures that the drugs provided to beneficiaries under the Pharmacare Program meet recognized standards of proven quality.

On April 1, 1980, on behalf of Medical Services, Health and Welfare Canada, Pharmacare was expanded to include the administration of prescription drug coverage for Formulary drugs for status Indian/Inuit persons. Medical Services funds the cost for this portion of the Pharmacare Program, and establishes the terms and conditions under which it operates.

During the same year, the Department of Health also undertook administrative responsibility on behalf of Social Services for the payment of formulary drugs for indigent non-Indian/non-Inuit residents. Social Services funds these costs and establishes the terms and conditions of the indigent portion of Pharmacare.

In 1986 the program for Non-native and Metis residents was expanded to provide additional assistance to eligible persons whose employer plan benefits fall short of the Department of Health program.

TOBACCO PROGRAM

The Department of Health has been collaborating with the Alberta Heart Foundation to promote and create "Smoke Free Spaces" within the Northwest Territories. There has been a significant increase in the number of schools, government departments, restaurants, retail stores and private sector workplaces that have established smoking guidelines within their jurisdictions.

The Tobacco Program is assisting northerners to change the environment to where the non-use of tobacco is becoming the norm. To effectively address this issue, it is critical that an intensive collaborative, cooperative effort be mounted by governments at all levels, private and public sector organizations and community groups at the grass roots level.

Changing the environment is an essential component to reduce and eliminate the onset of tobacco use in our children and youth.

The establishment of a smoking policy has been completed by the Department of Health and has been given Executive Council approval for implementation in 1987.

Over the next year the Tobacco Program will continue to create informed public discussion and decision making about the health, social and economic consequences of tobacco use in the Northwest Territories.

NORTHWEST TERRITORIES SCHOOL HEALTH PROGRAM

The high rate of injuries due to accidents and violence, suicides, sexually transmitted diseases, teenage pregnancies, infant mortality, alcohol and drug abuse, and other health problems related to lifestyle choices led to the introduction of the School Health Program in 1983. The goal of this program is to develop a complete health education curriculum for all schools in the Northwest Territories, from kindergarten through grade 12.

The program is being developed in three major stages. The first stage focused on the health needs and priorities of residents of the Northwest Territories and took two approaches. One approach consisted of a qualitative study which included questionnaires and interviews aimed at determining the perceived needs of students, parents, teachers, school administrators and local education authorities. In all, some three thousand (3,000) responses were collected in the qualitative assessment. The second approach consisted of a quantitative analysis of health care data. Prevalence of illnesses for various age groups was determined by the frequency of visitations to health professionals. Once the health needs and priorities were established, educational goals and objectives were formulated to address them.

The second stage of the School Health Program consists of the development of learning materials and the pilot testing of these materials in selected classrooms. Revision and implementation constitute the third and final stage of the program. At the end of the 1985-86 school year two strands of the curriculum, "Alcohol and Other Drugs" and "Mental and Emotional Well-Being", had been developed, pilot tested and implemented. "Growth and Development" is nearing pilot testing completion. "Family Life",

"Safety and First Aid" and "Dental Health" will be pilot tested in the near future. They will be revised and optionally implemented during the 1987-88 school year. Mandatory implementation will be in the fall of 1989.

The School Health Program is funded by Health and Welfare Canada, Health Promotion Directorate. The program staff are guided by an advisory committee composed of a cross section of Northwest Territories residents representing communities, interest groups and professionals in the fields of health and education. The program also has an official evaluator, a professor of health education from the University of Manitoba, as an additional source of quality control.

MEDICAL TRANSPORTATION PROGRAM

In the Northwest Territories people must often travel long distances at considerable cost in order to receive necessary health services. Medical transportation benefits are available to Northwest Territories residents so that these costs will not prevent them from getting the care they need. Medical transportation benefits are provided through either Government or employer-sponsored programs. The Government programs are limited to people who do not have access to similar benefits from any other source, such as an employer. There are two Government programs:

1. Federal Government

   Health and Welfare Canada pays all the costs of medical transportation for Registered Indians and also for Inuit residents on the outgoing portion of their journey. Travel costs are also paid for medical and non-medical escorts.

2. Government of the Northwest Territories

The Department of Health, through its Medical Transportation Program, provides benefits to the following groups:

a) Non-Native Residents of The Northwest Territories - airfare costs for patients (and ambulance costs in certain circumstances); all transportation costs for medical and non-medical escorts.

b) Indigent Non-Native Residents - all transportation costs for patients and their escorts.

c) Returning Inuit - all transportation costs for patients and their escorts on the homeward portion of their journey.

In addition, people suffering from debilitating chronic diseases are eligible for comprehensive medical travel benefits under the Extended Medical Benefits program.

The Department of Social Services pays medical transportation costs for persons on compassionate travel (travel requested by a physician to enable a family member to visit a hospitalized patient in critical condition). The person travelling must be in financial need to qualify for benefits.

Administration

Government of the Northwest Territories medical travel warrants are used to authorize all medical travel in emergencies for non-residents and persons eligible for benefits through their employment. The Department of Health pays for airlines and then recovers the airfare costs from the appropriate responsible parties. Other costs (eg. taxi, ambulance, accomodation) are paid directly by the responsible parties in most cases.

Medical Transportation Data

The accompanying table shows the number of G.N.W.T. medical travel warrants issued in 1986 under the government programs described above. On average, more than one patient is authorized to travel per warrant.

GOVERNMENT MEDICAL TRANSPORTATION PROGRAMS

NUMBER AND COST OF WARRANTS 1986

	NUMBER OF WARRANTS	TOTAL COST OF WARRANTS
1. GOVERNMENT OF THE N.W.T.		
a) Non-Native Residents	1,573	$ 953,174
b) Indigent Non-Native Residents	331	96,985
c) Returning Inuit Residents	5,857	2,140,247
d) Extended Medical Benefits	254	91,188
e) Compassionate Travel	105	35,956
TOTALS	8,120	$ 3,317,550
2. HEALTH AND WELFARE CANADA		
a) Status Indian and Inuit Residents	11,894	$ 7,200,436
GRAND TOTALS	20,014	$10,517,986

AMBULANCE SERVICES IN THE N.W.T.

In April of 1984, the Honourable Bruce McLaughlin, Minister of Health, Government of the Northwest Territories, appointed the Air and Ground Ambulance Policy Advisory Committee, with representatives from the Government of The Northwest Territories (Department of Health and local Government), Health and Welfare Canada, the St. John Ambulance, the R.C.M.P. and The Northwest Territories Association of Municipalities. This committee was instructed to examine current ambulance services in The Northwest Territories and to provide advice to the Minister regarding the development of legislation, regulations and other aspects of policy pertaining to air and ground ambulance services.

In October of 1985 the committee presented their final report to the Minister summarizing their findings and recommendations. The Minister tabled the preliminary report for the Legislative Assembly in October.

The Executive Council has given approval for the development of an action plan for ambulance services using the report of the Advisory Committee as a guide. The Department of Health will present the action plan to the Executive Council for approval in the spring of 1987.

HEALTH TRAINING BURSARY PROGRAM

The Health Training Bursary Program pays tuition and/or expenses to assist persons interested in furthering or obtaining a career in health care for which there is a need in the Northwest Territories. Studies that are covered include: nursing, physiotherapy, occupational therapy, x-ray technology, nutrition, health education and many others.

The programs may be: full-time or part-time at a university, college or technical institute, as well as correspondance courses, extension courses, and diploma or certificate courses at other institutions.

Both residents and non-residents can apply for a Northwest Territories bursary, but Northwest Territories residents are given priority.

Students who receive a bursary are required to work in the Northwest Territories for a period of three (3) months for every $750.00 awarded in bursary monies on completion of the course(s). The minimum service committment shall be three (3) months.

Criteria for awarding bursaries are judged on:

- how long a person has lived in The Northwest Territories;
- the need for trained people in the studies applied for;
- work history and references;
- the length of the course or courses;
- the need for financial assistance.

The deadline for applications is March 31st of each year.

PHYSICIAN RECRUITMENT PROGRAM

At the request of Medical Services Branch, Health & Welfare Canada, the Department of Health, Government of the Northwest Territories, assumed responsibility in 1982 for recruiting and staffing physicians in several remote communities of The Northwest Territories where Health and Welfare had already established federal hospitals and nursing stations.

Since that time Baffin Regional Hospital has come under the authority of the Government of The Northwest Territories, and with that

change, the hospital assumed direct responsibility for its recruitment. The same situation occurred in Fort Smith where a stable physician team has been in place this past year.

The Physician Recruitment Program within the Programs and Standards Division of the Department of Health carries responsibilities for the recruitment of six (6) physicians in Inuvik and solo physicians in Rae/Edzo, Cambridge Bay and Fort Simpson. The physicians in these communities make monthly visits to the outlying settlements, conduct medical clinics and make appropriate referrals.

The recruitment staff work closely with other government and private physician incentive programs to seek physicians with experience and a keen interest in working in the north. Both full-time and replacement physicians are recruited.

A benefits package has been developed for one-year renewable appointments. These are salaried positions with leave provisions and other benefits designed to be competitive with other programs across the country. Discussions with interested physicians often focus on the advantages of the northern medical experience. They include discussion of the practicalities of life in the north, especially when the needs of the spouses and children of physicians are as significant in a relocation decision as the practice opportunity for the physician.

The program also supports two billing clerks and one medical secretary in Inuvik to help with medical payments.

THE DR. OTTO SCHAEFER HEALTH RESOURCE CENTRE

The Dr. Otto Schaefer Health Resource Centre is the major health sciences resource in the Northwest Territories. It is a jointly funded operation of the Government of the Northwest Territories Department of Health and the Northest Territories Region of Medical Services. The Resource Centre serves both government departmental health personnel, allied health professionals, native organizations, schools, and the general public.

Among the subject areas that are collected in different print and non-print formats are health care and education, nutrition, alcohol and drug abuse, family life education, nursing, health care administration and hospital management. The growing audio-visual collection and the large pamphlet collection are used mostly for the health education of northerners. The journal and book collections, which are presently being updated, are designed to help the professionals in their work, as well as providing information of a general nature.

The Resource Centre filled its complement of three (3) staff members in the last year and have undertaken a re-organizing and updating of the entire collection. Pamphlets and audio-visual materials are being mailed out regularly upon request and a limited reference service is now possible.

NUTRITION PROGRAM

During 1986 Nutrition Programs were coordinated in the Northwest Territories by two staff members, the Regional Nutritionist located at the Regional Office in Yellowknife and the Nutrition Month Coordinator, a nine month term position also located in Yellowknife.

The main activities in 1986 have been two nutrition educator campaigns:

1) producing the nutrition chapter of the Community Nursing Manual; and
2) the P.C.B. food intake survey in Broughton Island.

The Nutritionist also coordinated the following three nutrition projects:

1) Evaluation of the five videos "Communications in Nutrition";
2) Evaluation of the Day Care Foodservices and Nutrition Manual; and
3) Infant Nutrition publications.

Other programs such as the "Vitamin Supplement Program" and nutrition consultation through the "Maternal and Child Program" continue to be delivered to the population by the field staff.

The Regional Nutritionist continued to co-chair the Nutrition Liaison Committee of the Northwest Territories which met three times in 1986. This committee provides a forum for exchanging views and developing new concepts on effective nutrition programing.

In terms of program delivery, the nurse and community health representatives have played an instrumental role in advancing the following nutrition education activities in the communities.

NUTRITION EDUCATION CAMPAIGNS

Nutrition Month:

In collaboration with the Canadian Dietetic Association and the Nutrition Liaison Committee of the Northwest Territories, Medical Services Branch coordinated the Nutrition Month 1986 campaign. "Good Food Is For Life" was the Northwest Territories slogan and "Eat Well. Live Well." was the national slogan. The campaign provided information on the following topics:

- General Nutrition and Lifestyle
- Sugar
- Snacks
- Salt
- Caffeine
- Botulism in the North
- Nutrition, Exercise and Weight Control
- Ideas for Incorporating Nutrition Education into the School Curriculum
- Recipes and References

Over fourteen hundred (1,400) resource kits, two thousand (2,000) nutrition posters and one thousand (1,000) buttons were developed and distributed throughout the Northwest Territories.

Evaluation of Nutrition Month:

Evaluation reports were returned from over eighty four percent(84%) of Northwest Territories communities. Seventy eight percent (78%) of the respondents said that people had learned about nutrition from the activities held during Nutrition Month. One hundred percent (100%) of the respondents

said the Nutrition Month campaign should be continued.

For the second year a poster contest was held. Again it was a success with four hundred and ninety (490) entries. For the first time a nutrition video contest was held and seven interesting nutrition videos were submitted.

World Food Day:

In collaboration with the World Food Day Association of the Northwest Territories, resource kits on the topic were distributed to all those who requested them. The purpose of the campaign is to promote an awareness of the world food situation among the Canadian population.

Nutrition Chapter of the Community Nursing Manual:

The nutrition chapter of the Community Nursing Manual was researched and finalized in 1986. This will allow nurses and Community Health Representatives to disseminate standard nutrition information to the Northwest Territories population.

Broughton Island Nutrition Survey:

The study of the eating habits and the possible effects of Polychlorinated Biphenyls (P.C.B.) was continued with the population of Broughton Island. Refer to Environmental Health And Surveillance Report, Chemical Residue Contamination of the Food Chain.

Coordination of Three Nutrition Projects:

The following projects were sponsored by the Yellowknife friendship centre "Tree of Peace" and coordinated by the Regional Nutritionist.

1) Evaluation of Five Nutrition Videos: Recently produced nutrition education videos featuring northern foods and northern residents were evaluated to determine if the local production of videos was an efficient way to do nutrition education. The results of the evaluation showed that the videos were acceptable to both facilitators and clients but that the videos should be used in conjunction with other teaching and not used as the sole means of providing information. The evaluation also determined that northern content and clearly addressing the interest areas of the target groups is essential in any future productions. Both facilitators and clients recommended more videos about nutrition be produced.

2) Evaluation of the Northwest Territories Foodservice and Nutrition Manual for Day Cares: A foodservice manual designed to assist day care workers providing healthy food in the Northwest Territories day care centres was developed in 1985. Its efficiency was evaluated in 1986. Results indicate that the manual was sufficiently self-instructional to enable day care workers to use the manual without the need of a workshop. Most of the objectives were met by both the group who were given a workshop and the group who were not given a workshop. Minor adjustments were made to the manual and it is now ready for distribution as a resource guide for day care centres in the Northwest Territories.

3) Infant Nutrition Publication: Five nutrition publications relevant to infant growth in the Northwest Territories were produced. They will assist nurses in the field in promoting good infant nutrition.

Other Nutrition Matters

1) Presentations to the Canadian Dietetic Association and American Dietetic Association: The Regional Nutritionist delivered two presentations on

the Northwest Territories nutrition month campaign. They were presented at both the Canadian and American Dietetic Association conferences.

2) Northern Nutrition Association: The Northern Association is still active and meets monthly. The purpose of the Northern Nutrition Association is to provide a forum for nutrition professionals to meet and promote nutrition among the residents of the Northwest Territories.

PUBLIC SERVICE HEALTH PROGRAM

For the year ending December 31st, 1986, a total of seven hundred and thirty five (735) medicals were received and actioned by the Public Service Health. Of the seven hundred thirty five medicals received, two hundred eighty six (286) or thirty nine point nine percent (39.9%) were for Health and Welfare Canada, Medical Services Branch. Of those two hundred and seventy one (271) medicals received, seventy nine point seven percent (79.7%) or two hundred twenty eight were pre-employment medicals while two point one percent (2.1%) or six (6) were periodic medicals. The remainder fell under elections, specials, dependents, and others.

1986 was the first full year of having a Regional Occupational Health Program with a Regional Environmental Health Officer, especially for Occupational Health and a Regional Occupational Health Nurse, who while developing an occupational health plan for the entire Northwest Territories also acted as Advisor to the Employee Assistance Program. In charge of the Occupational Health program is the Regional Medical Officer. The Regional Environmental Health Officer and the Occupational Health Nurse act as consultants to all Zones in the Northwest Territories where there are federally employed public servants.

An Employee Assistance Program training session was held in Edmonton in the fall with seven (7) more people being trained as referral agents. This year a number of Environmental Health Officers were selected as they seem to travel the most and thus have contact with the greatest number of Medical Services staff. This has proved to be quite an effective group.

The pending transfer of health services has created a considerable amount of anxiety. As a result, Stress Management sessions were made available to everyone. The response to these day long seminars has been very positive with many taking advantage of the followup time for more indepth counselling and advice. A followup session will be offered to each group in the near future.

Our contract with Northwest Territories Family Services provides orientations for field nurses, assessments under the Employee Assistance programme, and followup counselling as needed for all Medical Services employees. Whether in person or by telephone to the various nursing stations, this has been a most beneficial service. Once the initial contact has been made during the orientation process there is less hesitation to call later and many potentially serious situations have been averted in a most professional and confidential manner.

NWT REGION PUBLIC SERVICE HEALTH
MEDICAL EXAMS RECEIVED DURING 1986 BY DEPARTMENT AND TYPE

DEPARTMENT	DEPENDENT	ELECTIONS	NS	PERIODIC	PRE-EMPLOY	SPECIAL	ALL
CCG	0	1	0	40	17	0	58
DDE	1	5	0	4	6	1	17
DPW	0	0	0	19	1	0	20
EMR	0	0	0	0	2	0	2
FAE	0	0	0	13	6	0	19
INA	6	2	0	0	5	0	13
JUS	0	2	0	0	0	0	2
MOT	20	4	0	53	54	4	135
NCP	51	1	0	2	41	0	95
NHW	40	3	3	6	228	6	286
NWT	0	44	0	2	9	30	85
RIE	0	1	0	0	0	0	1
ALL	118	63	3	139	369	41	733

ENVIRONMENTAL HEALTH AND SURVEILLANCE

Water and Sanitation

The department of Municipal and Community Affairs has ongoing studies and plans for upgrading water and sanitation in the communities. However, in some areas the communities are expanding faster than the municipal services. More communities are applying for water licenses and upgrading of their facilities. Research projects are being conducted on fluoridating of water supplies. These areas of activity require the continuing participation of Medical Services.

All Zones now have their own "Millipore" test kits for bacteriological analysis of water, although transportation of samples to Zone offices remains a problem in some areas. More resources and greater priority should be attached to chemical sampling. Sharing of information from other monitoring agencies has been helpful, but is not sufficient. Some Zones have "HACH" chemical testing kits which are useful for screening with more extensive laboratory testing to follow if required.

Inspections of water and sanitation facilities are carried out during every visit to a community. Liaison is maintained with Indian and Northern Affairs, Environment Canada, Fisheries and Oceans and others who have regulatory responsiblilities, to keep Environmental Health Officers informed of the conditions in the community and alert to potential problems.

Food

During the last year the Northwest Territories has seen a few "firsts": the shipping of glacial ice to Expo 86; a poultry farm being set up in Hay River, hoping to export eggs to the south and sell eggs and chickens

in the north; a dairy farm in Yellowknife; and butchering facilities in communities throughout the North (promoted by Economic Development with the aim to encourage intersettlement trade and the export of country food to southern Canada). Each of these ventures has provided a challenge in the absence of relevant Territorial legislation, and lack of experience and knowledge by Environmental Health Officers in these specific areas.

Public Facilities

Public facilities such as schools, recreational facilities, accommodation facilities, community halls, day cares, hospitals, nursing and senior citizens facilities, beauty and barber shops are inspected during a community visit. Again, inadequate or no legislation in these areas continues to cause problems.

Housing

Housing is continuously being upgraded through the efforts of the Northwest Territorial Housing Corporation. However, there has been insufficient money allocated to meet the demand. The "rehab" program is providing homes with more adequately sized water tanks and adding sewage holding tanks to replace "honey bucket" arrangements. New housing starts are evident in most communities.

Dangerous Goods Act

Application of this act is causing great difficulty in the shipping of chemicals required in the field, and potentially for the shipment of blood and other specimens for analysis. This is a problem that should be addressed

globally at headquarters level as a priority matter, rather than piecemeal in the field.

Public Health Engineering

Northwest Territories Region requires the services of a Public Health Engineer to represent Medical Services interests on the Technical Advisory Committee of the Northwest Territories Water Board, and to review engineering plans. These duties do not require a full time person, but could be handled through a contract.

Emergency Services

There are many emergency scenarios that involve the services of an Environmental Health Officer, therefore that Environmental Health Officer has to be trained and have participated in exercises. It is also important that the Environmental Health Officer be a participant in the preparation of an Emergency Plan. The Environmental Health Officer, with the assistance of the Community Health Nurse, conducts an annual inventory and replacement of materials in the Airport Disaster and Casualty Collection Kits.

"Delegated" Functions

Due to lack of representation in the Northwest Territories of the Health Protection Branch, and Agriculture Canada, for example, Medical Services is occasionally, but increasingly requested or required to act on their behalf, in relation to inspection and control activities for eggs, milk, poultry and country food, and in relation to chemical contaminants.

Chemical Spills

A "Spill Report Hot-line" has been established in the Northwest Territories. The major incidents to date have been oil spills, largely the result of improper handling and storage procedures. Unfortunately, several of these spills have contaminated community water supplies.

Chemical Residue Contamination of the Food Chain

It has been evident for over a decade that the Arctic environment has been extensively contaminated by chemical residues, predominantly from far distant industrial activities. This contamination has been without apparent short term ill effects; the long term implications are unknown. The principal concern has become focused on those contaminants which enter the food chain. For some contaminants, "tolerable levels" for effected foods have been established by the Health Protection Branch. These levels are based upon presumed consumption patterns which may be dramatically different than those which prevail in northern native communities. This raises the concern that such communities may be at risk of contaminant intakes inimical to health.

The issue of PCB contamination of food sources for northern communities attracted attention as a consequence of the somewhat belated cleanup during 1985 of Distant Early Warning (DEW) line sites. While there had been some suspicion that DEW line sites might be the source of PCB pollution of the Northern environment, the observed contamination of fish and marine mammals in Arctic waters is now believed to have arisen as an extension of global contamination. It is known that there are some naturally occuring sources of mercury contamination in the Arctic, but that these are supplemented by air deposition and water transport.

In September, 1985, a pilot survey was initiated in Broughton Island to assess the extent to which PCBs and organic mercury from whatever origin have become dietary contaminants, and to determine the associated levels of PCBs in blood and breast milk. Detailed information regarding dietary intake was collected from 297 individuals during the initial survey period. Over 200 individuals offered blood and most of the nursing women provided one or more samples of breast milk.

Analysis of data for the first of an intended series of survey periods has been completed. Results confirm PCB contamination of the food supply sufficient to result in PCB intake significantly above the "tolerable level" for about 20% of the study population. (Table 1) Blood PCB levels are above "tolerable" in over 60% of children under the age of 15 years, and in about 40% of women of childbearing age (15-44). (Table 2) Similar proportions of both groups exceeded the tolerable blood levels for organic mercury. (Table 3)

Many other contaminants have been isolated, principally pesticide residues, almost exclusively from far distant sources. Recently, elevated levels of toxaphene and chlordane have been found in the liver of burbot - a prized food fish for many Mackenzie River communities. The implications are not known, and will not be known without considerable effort.

The food of southern Canadians is contaminated also, but the opportunities for escaping excessive intake, through avoidance and food substitution, are more easily applied. Industrial man has succeeded in fouling his nest, but it seems that those most likely to be adversely affected will be those in subsistence economies.

Radiological Hazards

The Advisory Committee, established initially to review the possible health hazards associated with abandoned uranium mining sites at Rayrock and at Port Radium, reported during 1986, finding no evidence of existing hazard from casual use of the areas involved. Recommendations were made regarding further monitoring, and the committee will continue to meet for the purpose of ensuring that the agreed upon measures are carried out.

The continued use of chlorofluorocarbons (CFC's) presents another example of human improvidence. The chemicals, used primarily as refrigerants, escape into the environment and are quickly distributed to the higher levels of the atmosphere where they react with ozone in such a manner to reduce protection against dangerous levels of ultraviolet light. CFCs released to date will increase skin cancer risk at higher latitudes by an estimated 10% to 16% and may also damage or destroy plankton and microscopic plant and animal life which is the very basis of the Arctic food chain.

PCB INTAKE IN MICROGRAMS PER DAY PER KILO OF BODY WEIGHT
PREGNANT AND/OR LACTATING WOMEN (PREGLACT): OTHERS - SEPTEMBER 1985

PCB ug/kg	Numbers PregLact	Others	Totals	Per Cent PregLact	Others	Totals
0	1	73	74	6.7	24.6	23.7
0.001	6	110	116	40.0	37.0	37.2
0.25	2	17	19	13.3	5.7	6.1
0.5	4	22	26	26.7	7.4	8.3
0.75	0	18	18	0.0	6.1	5.8
1	1	29	30	6.7	9.8	9.6
2	0	6	6	0.0	2.0	1.9
3	0	1	1	0.0	0.3	0.3
4	0	3	3	0.0	1.0	1.0
5	0	12	12	0.0	4.0	3.8
10	1	4	5	6.7	1.3	1.6
15	0	1	1	0.0	0.3	0.3
20	0	0	0	0.0	0.0	0.0
25	0	0	0	0.0	0.0	0.0
30	0	0	0	0.0	0.0	0.0
35	0	1	1	0.0	0.3	0.3
40	0	0	0	0.0	0.0	0.0
Totals	15	297	312	100	100	100

Tolerable intake - 1 microgram / kilo of body weight per day
(ug - microgram per kilogram)

SUMMARY OF PCB BLOOD LEVELS (ppb) BY RISK GROUPS

Risk Group	Below Detection	1-4	5-19	20-	Total
	Numbers				
Children (under 15)	4	13	27	2	46
Women (15-44)	10	19	23	0	52
Pregnant Women	3	1	2	0	6
Lactating Women	6	2	1	0	9
Males (15 plus)	3	6	57	4	70
Females (45 plus)	0	0	17	7	24
ALL	26	41	127	13	207

Risk Group	Below Detection	1-4	5-19	20-	Total
	Per Cent				
Children (under 15)	8.7	28.3	58.7	4.3	100
Women (15-44)	19.2	36.5	44.2	0.0	100
Pregnant Women	50.0	16.7	33.3	0.0	100
Lactating Women	66.7	22.2	11.1	0.0	100
Males (over 15)	4.3	8.6	81.4	5.7	100
Females (over 45)	0.0	0.0	70.8	29.2	100
ALL	12.6	19.8	61.4	6.3	100

SUMMARY OF ORGANIC MERCURY BLOOD LEVELS BY RISK GROUP
Distribution of Blood Levels in parts per billion

Risk Group	Numbers 0-19	20-99	Over 100	ALL	Per Cent 0-19	20-99	Over 100	ALL
Pregnant/Lactating	7	7	0	14	50.0	50.0	0.0	100.0
Other Women (15-44)	27	25	0	52	51.9	48.1	0.0	100.0
Children (under 15)	33	12	0	45	73.3	26.7	0.0	100.0
Adult Males (over 15)	13	52	3	68	19.1	76.5	4.4	100.0
Older Females (over 45)	0	23	0	23	0.0	100.0	0.0	100.0
Unspecified	1	0	0	1	100.0	0.0	0.0	100.0
Totals	81	119	3	203	39.9	58.6	1.5	100.0

Tolerable intake less than 20 parts per billion

A greater increase in client awareness of occupational health and occupational health services has been achieved. This has been achieved through continuing effort by Zone Environmental Health Officers (EHO's), supported by regional resource personnel. Staffing levels to full ranks in the Mackenzie zone, has improved service to clients south of Great Slave Lake.

Transfer of health services in the Baffin Zone (to the Government of the Northwest Territories) does not initially appear to have adversely effected the Public Service Health program. Long term responsibility for the occupational health and surveillance sub-component of the Public Service Health program in the Baffin Zone has not yet been determined.

Emphasis for the 1987-88 fiscal year will continue to focus on the educational component, supplementing an ongoing inspection and monitoring program.

EMERGENCY SERVICES

The Territorial Emergency Control Committee (TECC) during the past year changed chairmanship and acquired a new Program Director. The Territorial Emergency Control Committee changed its structure to a two-tiered system:

1. Immediate Response Group, which meets on a quarterly basis.
2. Support Group which meets on an as required basis, whose function is planning and operations.

The Regional Manager - Environmental Health Services, is the Health and Welfare representative on both committees.

During the past year, emphasis was on identifying where Airport Disaster Kits (ADK's) and Casualty Collection Units (CCU's) were located; upgrading some of the units to larger units; and replenishing supplies and expired pharmaceuticals. The Environmental Health Officer and the Community Health Nurse conduct an annual inventory and replacement of materials in the Airport Disaster Kit and the Casualty Collection Unit.

A protocol has been established for upgrading Casualty Collection Units - communities will forward their requests to the Territorial Emergency Control Committee, who will decide on the placement of any new units or upgrading of the units.

All new Medical Services Branch employees, during their orientation are informed of Emergency Planning. They are advised to find out who is the Emergency Measures Organizer Coordinator for the community and to locate where Airport Disaster Kits and Casualty Collection Units are located. Mock disasters take place in the communities, giving all participants experience with a disaster and hopefully identifying any weak spots.

In April, 1986 a Nuclear Reactor in Chernobyl, USSR blew up causing the leakage of radiation into the atmosphere, which effected the entire world. Air monitoring was carried out by Atmospheric Environment Services, Environment Canada, on a daily basis. Samples of Country Food were submitted to Radiation Protection Branch, Health and Welfare Canada, for analysis. Territorial Emergency Control Committee coordinated the dissemination of information as soon as it was received from Emergency Planning Canada.

There are many emergency scenarios that involve the services of Medical Services Branch personnel, therefore it is essential that they be trained and have participated in exercises. It is also important that the local Community Health Nurse and Environmental Health Officer be participants in the preparation of the Emergency Plan.

DENTAL HEALTH PROGRAM

Dental services are provided to Northwest Territories residents through the co-ordination of various combinations of universities, governments and private contractual arrangements utilizing a variety of dental and para-dental auxiliaries. Clients obtain the complete spectrum of dental services in all Zones, which includes diagnostic, preventive, restorative, endodontic, periodontic, prosthetic, surgical, and adjunctive oral procedures.

In the Keewatin Zone government employed dental surgeons provide acute care services, while private practitioners operating clinics within major centres service the Inuvik and Mackenzie Zones. Service delivery within small communities throughout the Northwest Territories is achieved by utilizing contractual arrangements which call for periodic treatment clinics on a fly-in basis. Clinic visit schedules are incorporated within the individual contract and/or contribution agreement.

Dental therapists are specially developed dental auxiliaries trained to operate solitary clinics, based within one settlement, and in addition, may service one or two satellite communities. Additional acute care services as well as preventive and public health services are provided by dental therapists. Therapists provide primary care, particularly to children, and conduct a comprehensive dental preventive program within the communities they serve. Prescriptions of treatment are provided by the supervising dentists which for the most part of 1986, were staff dentists from the National School of Dental Therapy.

Twenty-four (24) dental therapists operated clinics throughout the Northwest Territories during 1986 for varying periods of time ranging from

three months to a full year. All therapists provided services equivalent to 16.07 person years. Currently, seventeen (17) of the twenty (20) allocated person years are permanently staffed. This situation cannot improve until more therapists graduate from the National School of Dental Therapy in June, 1987.

The National School of Dental Therapy, as in previous years, held prolonged undergraduate teaching clinics within the Region. Sanikiluaq was chosen for this field clinic.

The service component of these visits is not the primary objective of the school, however, these clinics do provide some continuity of dental treatment within selected communities.

Supervisory visits are provided twice yearly by the National School of Dental Therapists to all Northwest Territories therapists. These visits serve to maintain quality control, provide input for program evaluation and function as the means for monitoring administration and treatment aspects of the dental therapy program.

Treatment services beyond the scope and training of dental therapists are provided through dental contractual arrangements.

Services within the Inuvik Zone are provided by contract services equivalent to 1.02 person years throughout the Zone. Renewing similar arrangements in the Mackenzie Zone provided services equivalent to 1.04 person years.

Services within the Keewatin Zone continue to be provided through a contract with the University of Manitoba and equate with 1.75 person years.

The treatment provided by dental therapists in 1986, as described in figure I, indicate that preventive services have continued to increase as

restorative and surgical services have decreased. Periodontal services remain level. These statistics are consistent with the observations made among the school aged population in 1985.

Figure II summarizes treatment provided by dental surgeons. The majority of the services provided by dental surgeons reflect treatment directed towards the adult population, although some school aged population is included. Diagnostic, preventative, periodontal, and adjunctive services continue to increase while restorative and surgical services tend to decrease.

Adult treatment patterns indicate a continuing shift away from purely emergency type services towards delivery of comprehensive services to address rehabilitative needs. It is anticipated that this pattern will continue in 1987.

DENTAL THERAPIST

FIELD REPORT

1986

FIGURE I

SERVICE	INUVIK ZONE	MACKENZIE ZONE	KEEWATIN ZONE	BAFFIN ZONE	N.S.D.T. FIELD CLINIC	TOTAL # OF TREATMENTS
NUMBER OF APPOINTMENTS	2,361	4,716	3,919	3,498	N/A	14,494
Examinations	362	672	672	848	178	2,732
Radiographs	604	1,393	1,506	1,173	401	5,077
Prophylaxis	1,243	3,185	1,906	1,531	216*	8,081
Pit and Fissure Sealants	1,201	1,545	1,137	1,542	367	5,792
Topical Fluoride Treatments	724	1,613	463	532	N/A	3,332
Amalgams - single surface	232	590	712	826	214	2,574
Amalgams - multiple surface	241	572	540	543	132	2,028
Resin Restorations	61	160	275	297	65	858
Primary Extractions	105	160	333	281	77	956
Permanent Extractions	84	188	562	639	92	1,565
Periodontal Procedures	95	356	193	168	69	881
Other Treatments	1,504	1,832	1,477	1,535	80	6,428

* Prophylaxis and Topical Fluoride Treatment combined.

DENTAL OFFICER

FIELD REPORT

1986

FIGURE II

SERVICE	INUVIK ZONE	MACKENZIE ZONE	KEEWATIN ZONE	BAFFIN ZONE	OUT OF TERRITORIES	TOTAL # OF TREATMENTS
NUMBER OF APPOINTMENTS	4,965	8,855	3,980	5,222	410	23,432
Examinations	3,077	6,161	970	1,228	157	11,593
Radiographs	1,126	1,990	270	633	235	4,254
Prophylaxis	3,079	5,206	223	407	48	8,963
Pit and Fissure Sealants	709	2,354	4	0	20	3,087
Topical Fluoride Treatments	783	1,829	236	10	32	2,890
Amalgams - single surface	1,629	2,750	633	437	78	5,527
Amalgams - multiple surface	1,527	2,801	537	497	103	5,465
Resin Restorations	1,503	2,657	449	251	86	4,946
Primary Extractions	223	265	630	875	0	1,993
Permanent Extractions	1,079	2,649	1,129	963	193	6,013
Periodontal Procedures	1,563	915	233	209	35	2,955
Other Treatments	854	505	1,783	3,014	206	6,362
Dentures Complete	172	148	145	98	4	567
Dentures Partial	364	357	142	126	12	1,001
Dentures Rebased	143	134	111	32	5	425
Dentures Repaired	100	107	172	65	4	448

INFECTIOUS DISEASE CONTROL UNIT

GENERAL INFORMATION

The research project "To Evaluate the Effectiveness of a Syndromic Approach to the Treatment of Sexually Transmitted Infections in Northern Communities" was withdrawn in the fall of 1986 by the investigators.

In mid year a computer began to make data collection and analysis more time and cost effective than the manual effort. The dark ages had been left behind!

The tuberculosis (T.B.) program has undergone continued revision. The nurses have been making a herculean effort to revise their community master lists which will help to re-establish the risk file for the Northwest Territories. The outbreak in Rae-Edzo area that commenced in June was a grim reminder that tuberculosis surveillance is still one of the most important priorities.

The AIDS Coordinating Committee has continued to develop the AIDS Control Program to the extent that, in 1987, a full time Program Coordinator will be involved. Information has been distributed on a regular basis to health care providers and others.

Gonorrhea has continued to be a problem, but an increasing number of reports have been received for genital Chlamydia Trachomatis infections. Chlamydia became a reportable disease this year in the Northwest Territories.

INFECTIOUS DISEASES-NOTIFIABLE

There were two outbreaks of note, tuberculosis and measles.

The tuberculosis outbreak occurred in Rae-Edzo and surrounding area. Fourteen (14) people developed the disease and, of these, eight (8) were new and six (6) were reactivations. A community survey of chest x-rays, tuberculin testing and sputum analyses was conducted. Over 2,000 tests were preformed on nearly 900 people. Over 40 people were placed on preventative drugs.

Cases continued to occur throughout the rest of the Northwest Territories until the total for the year was twenty-three (23) cases.

A measles epidemic occurred in the Keewatin Zone. Of the ninety-six (96) cases reported in the Territories, eighty-four (84) occurred in three (3) Keewatin settlements. Investigation of the data obtained during the epidemic showed that there is a need for improved disease reporting, for improvement in the immunization program, and for increased specimen collection for laboratory confirmation of disease.

OTHER INFECTIOUS DISEASES
Other than Sexually Transmitted Diseases

DISEASE	YEAR	INUVIK	MACKENZIE	KEEWATIN	BAFFIN	TOTAL-NWT
Amoebiasis	1986	0	0	1	1	2
(006)	1985	0	0	0	0	0
	1984	0	0	0	0	0
Botulism	1986	3	0	0	0	3
(005.1)	1985	0	0	0	0	0
	1984	3	0	0	0	3
Brucellosis	1986	0	0	2	5	7
(023)	1985	1	1	0	3	5
	1984	0	0	1	3	4
Campylobacteriosis	1986	1	6	0	1	8
	1985	*	*	*	*	*
	1984	*	*	*	*	*
Chicken Pox	1986	unavailable	by zones			337
(052)	1985	*	*	*	*	*
	1984	*	*	*	*	*
Diptheria	1986	0	0	0	1	1
(002)	1985	0	0	0	0	0
	1984	0	0	0	0	0
Giardiasis	1986	7	14	0	10	31
(007.1)	1985	5	6	4	6	21
	1984	7	12	2	14	35
Haemophilus	1986	5	8	1	0	14
Influenza (B)	1985	0	2	2	5	9
(320.0)	1984	0	3	1	5	9
Hepatitis (A)	1986	0	0	0	1	1
(070.1)	1985	0	3	0	0	3
	1984	1	1	0	0	2
Hepatitis (B)	1986	3	3	1	0	7
(070.3)	1985	3	5	0	0	8
	1984	0	4	0	1	5
Hepatitis, other	1986	0	0	0	0	0
viral	1985	0	0	0	0	0
	1984	1	0	0	1	2
Measles	1986	6	8	104	5	123
(005)	1985	2	8	8	6	24
	1984	3	24	0	8	35

* Not reportable

OTHER INFECTIOUS DISEASES
Other than Sexually Transmitted Diseases

DISEASE	YEAR	INUVIK	MACKENZIE	KEEWATIN	BAFFIN	TOTAL-NWT
Meningitis	1986	0	0	0	0	0
Pneumococcal	1985	1	0	1	0	2
(320.1)	1984	0	2	1	0	3
Meningitis	1986	0	2	0	6	8
Bacterial	1985	0	1	1	4	6
Unspecified 322.9	1984	1	6	0	3	10
Meningitis	1986	0	2	0	1	3
viral	1985	0	0	0	3	3
(047)	1984	0	0	0	0	0
Meningococcal	1986	0	0	0	0	0
Meningitis	1985	0	1	0	2	3
(036)	1984	2	0	0	0	2
Mumps	1986	2	0	1	6	9
(072.9)	1985	1	2	0	3	6
	1984	3	3	7	0	13
Malaria	1986	0	0	1	0	1
(084)	1985	0	0	0	0	0
	1984	0	0	0	0	0
Pertussis	1986	0	0	0	10	10
(033)	1985	0	0	0	54	54
	1984	0	0	1	0	1
Rubella	1986	3	4	1	0	8
(056)	1985	0	1	0	0	1
	1984	0	6	0	3	9
Salmonellosis	1986	4	12	5	15	36
(003)	1985	6	21	0	19	46
	1984	3	21	0	6	30
Shigellosis	1986	7	1	0	0	8
(004)	1985	17	10	1	0	28
	1984	2	17	0	0	19
Trichinosis	1986	0	0	6	0	6
(124)	1985	0	0	0	0	0
	1984	0	0	2	10	12
Tuberculosis	1986	2	19	2	0	23
	1985	2	6	0	1	9
	1984	3	14	2	1	20

SEXUALLY TRANSMITTED DISEASES

Syphilis and Other Sexually Transmitted Diseases, Except Gonorrhea

There were four (4) cases of primary syphilis reported this year;

Three (3) males

One (1) female

(Ages 29 - 34 years of age)

Gonorrhea

Gonorrhea is reported as confirmed or unconfirmed using the following criteria:

(1) Confirmed - includes micro-positive and clinically accepted cases from all areas. Confirmed cases are reported to statistics Canada.

(2) Unconfirmed - includes all suspected cases treated but not included in (1). Unconfirmed cases are NOT reported to Statistics Canada.

GONORRHEA INCIDENCE BY SEX AND AGE GROUP (CONFIRMED)

0-1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-59		60+		Age??		?
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	?
0	0	1	2	1	0	6	10	145	173	316	184	204	100	160	48	46	33	4	0	1	0	2

Total: 1,436

GONORRHEA INCIDENCE BY SEX AND AGE GROUP (UNCONFIRMED)

0-1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-59		60+		Age??	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
0	0	0	0	1	1	0	10	48	127	121	125	88	54	86	40	34	14	5	0	0	0

Total: 754

GONORRHEA INCIDENCE BY SEX AND AGE GROUP (ALL CATAGORIES COMBINED)

0-1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-59		60+		Age??		?
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	?
0	0	1	2	2	1	6	20	193	300	437	309	292	154	246	88	80	47	9	0	1	0	2

Total: 2,190

NORTHWEST TERRITORIES GONORRHEA RATES PER 100,000 POPULATION

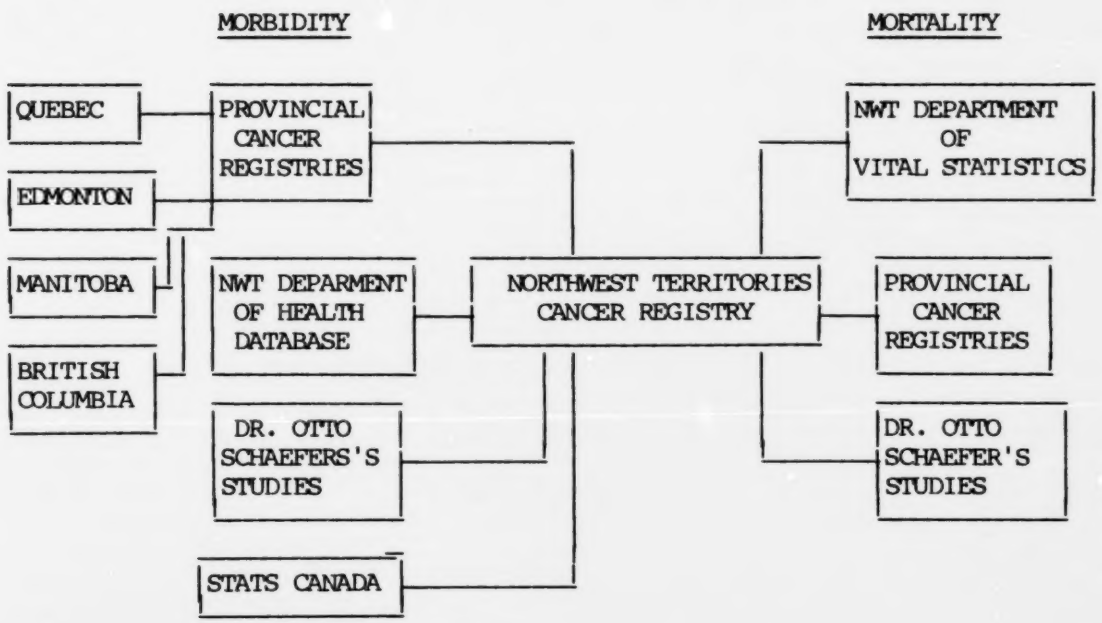
	N.W.T. Population 1986 52,064	N.W.T. Population 1985 51,012
Confirmed: cases	1,436	1,207
rates	2,758 / 100,000	2,366 / 100,000
Unconfirmed: cases	754	617
rates	1,448 / 100,000	1,209 / 100,000
Combined: cases	2,190	1,824
rates	4,206 / 100,000	3,576 / 100,000

NORTHWEST TERRITORIES CANCER REGISTRY

Cancer registration for the Northwest Territories has traditionally been carried out through the Chronic Disease Registry of the Northern Medical Unit, located in Edmonton. However, with the closure of the unit in 1985, the responsibility of registration was transferred to Medical Services in Yellowknife.

In May 1986, Medical Services and The Department of Health jointly agreed to set up a registry in the Northwest Territories. With the appointment of the Territorial Epidemiologist in early 1986, it was decided the appointee would take a lead role, as well as be responsible for cancer registration in the North.

Sources of Mortality and Morbidity Information To The Northwest Territories Cancer Registry



The Northwest Territories Cancer Registry is now a part of the National Cancer Registrars Association, and the Circumpolar Study Group on Cancer Among the Inuit.

In the future, it is hoped that the physicians and hospitals will send the information on cancer patients into the registry as soon as the patient is diagnosed. In turn, the registry hopes to set up a follow-up system to assist doctors in keeping track of their patients' progress.

Currently, the Department of Health is looking into streamlining pap smear follow-up, and hopefully in the near future this will be achieved through the British Columbia Cytology Registry. This system will enable us to follow-up on all abnormal pap smears at regular intervals, thereby identifying cervical cancer at an early stage.

Educational material and efforts at creating cancer awareness have been started. Emphasis has been placed upon lung cancer as well as smoking and chewing tobacco.

It is hoped that in the future the registry will form a basis for monitoring cancer trends in the Territories. In addition, the registry will correlate morbidity and mortality trends to specific etiological factors, whether it be diet, environment or social factors.

Preliminary cost analysis has indicated that approximately $12 - $15 million has been spent on cancer related visits for residents of the Northwest Territories. This includes visits both within the Northwest Territories and outside. It is hoped that the registry will monitor and control these costs by providing necessary information or preventive and promotive programs, as well as policy and planning implementation within the government.

Total number of deaths due to cancer in the Northwest Territories (1950 - 1986) is 749

MORTALITY 1950 - 1986

Area of Neoplasm	Number of Deaths	% of Total Cancer Deaths
Lung	193	25.7
Colon	53	7.1
Primary site unknown	52	6.9
Breast	33	4.4
Stomach	29	3.9
Pancreas	29	3.9
Cervix Uteri	27	3.6
Kidney	27	3.6
Rectum	26	3.5
Esophagus	21	2.8
All Others	259	34.6
Total	749	100.0

MORTALITY BY REGION 1950 - 1986

Area of Neoplasm	Number of Deaths by Region					
	BAFFIN	FT.SMITH	INUVIK	KEEWATIN	KITIKMEOT	NWT
Lung	53	63	24	30	17	6
Colon	2	30	17	1	3	-
Primary Site unknown	10	21	11	8	2	-
Breast	2	23	6	-	1	1
Stomach	4	16	3	1	2	3
Pancreas	2	16	7	2	2	-
Cervix Uteri	6	17	3	-	1	-
Kidney	5	12	6	1	2	1
Rectum	1	17	5	2	1	-
Esophagus	4	9	2	2	4	-
All others	47	113	36	26	23	14
Total	136	337	120	73	58	25

Note: NWT refers to Northwest Territories residents, region unknown

Total number of deaths due to cancer in the Northwest Territories for 1986 is 38

NUMBER OF DEATHS DUE TO CANCER BY REGION FOR 1986

Region	Number of Deaths	% of Total Deaths	Rate/1000 Population
Baffin	12	31.5	1.22
Fort Smith	15	39.5	0.61
Inuvik	5	13.2	0.61
Keewatin	2	5.3	0.41
Ketikmeot	4	10.5	1.08
Total	38	100.0	3.93

Please note that the rate/thousand population was calculated based on the 1986 census to provide a rough estimate. Age standardized rates by census population data from 1951 onwards are now being calculated.

MORTALITY 1986

Area of Neoplasm	Number of Deaths	% of Total Cancer Deaths
Lung	11	28.9
Colon	4	10.5
Stomach	4	10.5
Prostate	3	7.9
All others	16	42.2
Total	38	100.0

NATIONAL NATIVE ALCOHOL & DRUG ABUSE PROGRAM (NNADAP)

BACKGROUND

The abuse of alcohol, drugs and other chemicals is considered to be the single most serious health problem among Indian and Inuit people. It is a prime factor in most high levels of native mortality and morbidity, and is closely linked with community tensions and disintegration, as well as a sense of dependence among native peoples.

MANDATE

Responsibility for the funding and support of National Native Alcohol & Drug Abuse Program was assigned to the Departments of National Health and Welfare and Indian Affairs and Northern Development on the basis of a Cabinet decision in March, 1982. The Department of National Health and Welfare has overall program responsibilities, including the development of National Native Alcohol & Drug Abuse Program policies, and the administration and management of their program. For its part, the Department of Indian Affairs and Northern Development will provide collaboration and support through other socio-economic programs.

OBJECTIVE

The objective of the program is to support Indian and Inuit people and their communities in establishing and operating programs aimed at arresting and offsetting high levels of alcohol, drug and solvent abuse among their populations living on reserve/in communities.

It is intended that the kind, quality and accessibility of alcohol

and drug abuse services for Indians and Inuit should compare favourably with those enjoyed by all Canadians and that the level of financial support for such services should commensurate with the level of measurable need among the Indian and Inuit population (as determined by reliable medical, social and other indicators of the incidence and effects of alcohol and drug abuse).

OPERATON

The program contributes the financial and/or human resources necessary to support community initiatives, through contribution agreements with appropriate community authorities and through technical assistance provided by program staff.

The program is based on community-controlled projects and programs responsible for the actual design and delivery of services. Support is provided through an integrated delivery system comprised of government departments and Indian and Inuit institutions or service organizations operating at all levels.

The program is composed of a number of interrelated program components intended to provide the following services:

Prevention

Consists of Community education, referral, counselling and advocacy programs operated by local Indian governments or by legitimate community authorities affiliated with Band Councils/Hamlet Councils.

Treatment

Consists of non-medical in-patient residential services, halfway (safe) houses and community treatment (out-patient programs located in the community).

OPERATING PROGRAMS

All communities wishing to continue with a program (usually prevention) in their community as well as communities wanting to start a new program must apply for funding on an annual basis. No program is automatically funded from year to year. All funding takes place on a fiscal year basis - April 1st to March 31st.

During the 1986/87 fiscal year, twenty-two (22) programs were funded through the National Native Alcohol and Drug Abuse Program.

The following communities were funded to provide alcohol and drug programs in 1986/87.

Baker Lake	Hay River Reserve
Cambridge Bay	Lake Harbour
Cape Dorset	Pond Inlet
Coppermine	Rankin Inlet
Clyde River	Spence Bay
Fort Good Hope	Snowdrift
Fort Franklin	Tuktoyaktuk
Fort Norman (2 programs)	Tree of Peace - Yellowkife
Fort Providence	Tuvvik Outpatient Centre - Iqaluit
Fort McPherson	Alcohol & Drug Worker Training
Town of Hay River	Program

Six (6) area resource centres for alcohol and drug material were also funded in 1986/87. These centres are situated within established alcohol and drug programs, and service all communities throughout the Northwest Territories.

The Resource Centres are situated as follows:

Delta House Treatment Centre	Inuvik
Northern Addiction Services	Yellowknife
Katimavik Centre	Cambridge Bay
Uncle Gabe's Friendship Centre	Fort Smith
Sapujjijit Friendship Centre	Rankin Inlet
Tuvvik/BRADIC Program	Iqaluit

There was a total of sixty-two (62) employees working in the National Native Alcohol & Drug Abuse Program (NNADAP) in 1986/87.

From a resolution made at the Annual Drug and Alcohol Conference in Churchill, Manitoba, a training co-ordinator was appointed from the government staff to co-ordinate all drug and alcohol program training for funded projects in the Northwest Territories. Both the Territorial Alcohol and Drug Program and the Federal Government Program - National Native Alcohol and Drug Abuse Program, placed dollars into the training fund to deliver consistent, standardized training to the funded projects during the year. A Training Committee was formed with representatives from the Government of The Northwest Territories Alcohol/Drug Co-ordinating Council and representatives from Medical Services - National Native Alcohol and Drug Abuse Program, to establish standards, approve training units and individual training requests from funded programs.

The National Native Alcohol and Drug Abuse Program staff work with the funded programs to help communities develop project proposals, do program co-ordination, give administrative support, monitor project activity,

evaluate projects, make operational assessments and liaise with the projects to help develop project counselling skills.

A Client Information System has been designed to gather statistical information from both the National Native Alcohol and Drug Abuse Program and the Government of The Northwest Territories Alcohol and Drug programs. This system will be implemented in the community projects in the 1987/88 fiscal year.

CIVIL AVIATION MEDICINE - WESTERN REGION

Civil Aviation Medicine is a directorate of the Medical Services Branch responsible for providing Aeromedical advice to Transport Canada regarding civilian aircrew licensing. In addition we provide education to the pilot population, assist in the approval of designated medical examiners, and in conjunction with the Canadian Aviation Safety Board, provide assistance in accident investigation. Western Region covers all of Alberta, the Northwest Territorial area north of Alberta, the Yukon, and part of northeastern British Columbia. In this region 9,435 medical assessments on aircrew were made. This is down 1% from last year. In May the Inuvik General Hospital was visited for the purpose of training staff in the performance of Aviation Medical Examinations. A videotape was produced for training purposes and has been left for the staff of the hospital. A new medical examiner was designated in Fort Simpson during 1986. This gives a total of seven (7) medical examiners in the Northwest Territories. They are located at Cambridge Bay, Fort Simpson, the Inuvik General Hospital, one private practitioner in Inuvik and three (3) examiners in Yellowknife. A lecture was given in Yellowknife for Phase II Civil Aviation Search and Rescue Association (CASARA) training in conjunction with the Canadian Forces.

There were no aircraft accidents investigated in the Northwest Territories during 1986.